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AD **414236**

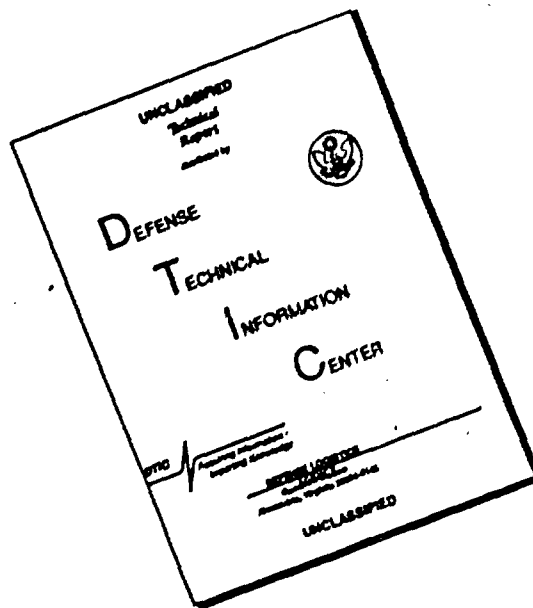DEFENSE DOCUMENTATION CENTER

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CAMERON STATION. ALEXANDRIA. VIRGINIA

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63-4-5

GROUND EFFECT MACHINE
PRESSURE DATA
Static Tests
University of Wichita
Department of Engineering Research
WICHITA, KANSAS

414236

TABULATED PRESSURE DATA
FOR A SERIES OF CIRCULAR, ANNULAR JET
GROUND EFFECT MACHINE MODELS

0.05   0°
0.10 $\circ^{\circ}$
0.10   30°
0.10   60°
Static Case

Engineering Report 352-8

INTRODUCTION

This volume is one of six, presenting tabulated pressure
data for a series of circular, annular jet ground effect
machines, which were tested at the Department of Engineer-
ing Research, University of Wichita, Wichita, Kansas. The
pressures listed are the differential above and below
atmospheric in pounds per sq. ft   A heading on top of
each page identifies the test point presented and provides
auxiliary information which may be useful in interpreting
the columnar data. From left to right the heading contains:

Run No., t/D, θ, h/D, q, Seq. No., α, P_M/P_o, B.P., ρ.

where:

Run No.	the sequential number corresponding to a test point.
t/D	model slot to diameter ratio.
θ	model convergence angle, positive inboard.
h/D	model height to diameter ratio.
q	wind tunnel dynamic pressure, lb/ft^2.
Sequence No.	see: Nomenclature and Explanation of Tabulated Data
α	model angle of attack.
P_M/P_o	model pressure ratio.
B.P.	barometric pressure, lb/ft^2.
ρ	static air density, $slugs/ft^3$.

The six volumes are accompanied by a special volume,
Nomenclature and Explanation of Tabulated Data, which
contains all the information necessary to find the
pressure tab location for a data point and vice versa.

1677 .05 0° .50 0 10.0 +2.5° 1.011 2031.8 .002243

a)				b)				c)	
1 - .1	51 + .2			1 + .1	51 + .1			1 + .2	
2 + 0	52 + .4			2 + .1	52 + .5			2 - 3.2	
3 + 0	53 + .2			3 + .1	53 + .1			3 - 5.1	
4 + 0.	54 + .7			4 + .1	54 + .2			4 - 4.3	
5 + 0	55 + .9			5 + .1	55 + .3			5 - 3.0	
6 + 0	56 + .8			6 + .1	56 + .3			6 + .4	
7 + 0	57 + .2			7 + .1	57 - 1.1			7 + .1	
8 + 0	58 - .2			8 + .1	58 - .9			8 + 4.2	
9 + 0	59 - .2			9 - .7	59 - .4			9 + 8.6	
10 - 3.5	60 + .3			10 + .4	60 + .5			10 +10.0	
11 + 0	61 + .4			11 + .1	61 + .6			11 - .6	
12 + 0	62 + .5			12 + .1	62 + .8			12 - 2.8	
13 + 0	63 + .5			13 + .1	63 + 1.5			13 - 2.9	
14 + 0	64 + .4			14 + 1.2	64 + 1.1			14 - 2.4	
15 + 0	65 + .4			15 + 0	65 + 1.1			15 + .4	
16 + 0	66 + .2			16 + 0	66 + 1.5			16 - .4	
17 + 0	67 + .2			17 + 0	67 + 1.6			17 + .9	
18 + 0	68 - .2			18 + 0	68 + 2.4			18 + 6.9	
19 + 0	69 + .2			19 - 0	69 + 1.3			19 +10.3	
20 + 0	70 - 1.2			20 + 0	70 + .6			20 + .2	
21 + 0	71 - 1.2			21 + 0	71 + .8			21 - 2.1	
22 + 0	72 - 1.2			22 + 0	72 + .9			22 - 3.9	
23 + 0	73 + .3			23 + 0	73 + .9			23 - 3.9	
24 + 0	74 - 4			24 + 0	74 + .2			24 - 3.6	
25 + 0	75 - 1.9			25 + .1	75 + .2			25 - 2.5	
26 + 0	76 - 1.4			26 + .1	76 + .2			26 - 2.2	
27 + 0	77 + .3			27 + .1	77 + .7			27 - 2.2	
28 + 0'	78 + .2			28 + .1	78 + 1.4			28 - .7	
29 + 0	79 + .2			29 + .1	79 + 2.1			29 + 3.3	
30 + 0	80 + .4			30 + .1	80 + 2.3			30 + .2	
31 + 0	81 + .4			31 + .1	81 + 2.5				
32 + 0	82 + .9			32 + .1	82 + 2.6			Seq. 5	
33 + 0	83 + .8			33 + .1	83 + 2.4				
34 + 0	84 + .7			34 + .1	84 + 1.9				
35 + 0	85 + 1.0			35 + .1	85 + 1.9				
36 + 0	86 + .9			36 + .1	86 + 1.1				
37 + 0	87 + .9			37 + .1	87 + .2				
38 + 0	88 + .2			38 + .1	88 + .8				
39 + .2	89 + .2			39 + .6	89 + .2				
40 + 0	90 + 1.2			40 + 0	90 + .6				
41 + 0	91 + 1.1			41 + 0	91 + .9				
42 + 0	92 - .8			42 + 0	92 + 1.1				
43 + 0	93 + .4			43 + 0	93 + .3				
44 + 0	94 + .5			44 + 0	94 + .2				
45 + 0	95 + .3			45 + 0	95 + .2				
46 + 0	96 + .3			46 + 0	96 + .4				
47 + 0	97 + .3			47 + 0	97 + .6				
48 + 0	98 - .4			48 + 0	98 + .5				
49 + 0	99 - .5			49 + 0	99 + .8				
50 + 0	100 + .2			50 + 0	100 + .2				

1678   .05   0°   .50   0   10.0   0°   1.011   2031.8   .002243

a)				b)				c)	
1 +	0.0	51 +	.1	1 -	.1	51 +	.1	1 -	.3
2 +	.1	52 +	.2	2 +	0	52 +	.6	2 -	1.0
3 +	.1	53 +	.2	3 -	.1	53 +	.3	3 -	1.8
4 +	.1	54 +	.2	4 +	0	54 +	.6	4 -	1.8
5 +	.1	55 +	.2	5 +	0	55 +	.9	5 -	1.6
6 +	.1	56 +	.1	6 +	0	56 +	.7	6 +	.5
7 +	.1	57 +	.1	7 +	0	57 +	.6	7 +	.2
8 +	.1	58 -	1.0	8 +	0	58 +	.6	8 +	2.5
9 +	.1	59 -	1.3	9 +	0	59 +	.7	9 +	7.2
10 +	.1	60 +	.3	10 +	0	60 +	1.2	10 +	9.3
11 +	.1	61 +	.4	11 +	0	61 +	.9	11 +	.1
12 +	.1	62 +	.0	12 +	.1	62 +	1.0	12 -	.8
13 +	.1	63 +	.6	13 +	.1	63 +	1.5	13 -	1.1
14 +	.1	64 +	.5	14 +	.2	64 +	.8	14 -	1.1
15 +	.1	65 +	.5	15 +	.1	65 +	.9	15 +	.5
16 +	.1	66 +	.6	16 +	0	66 +	1.0	16 +	.1
17 +	.1	67 -	.2	17 +	0	67 +	1.4	17 +	.3
18 +	.1	68 +	.4	18 +	0	68 +	1.9	18 +	5.1
19 +	.1	69 +	.5	19 +	0	69 +	1.5	19 +	9.7
20 +	.1	70 -	.9	20 +	0	70 +	1.2	20 +	.1
21 +	.1	71 -	.8	21 +	0	71 +	1.1	21 -	2.7
22 +	.1	72 -	.8	22 +	0	72 +	.6	22 -	4.8
23 +	.1	73 +	.2	23 +	0	73 +	.6	23 -	4.3
24 +	.1	74 +	.2	24 +	.5	74 +	.5	24 -	3.2
25 +	.1	75 -	.7	25 +	0	75 +	.5	25 +	.1
26 +	.1	76 -	.7	26 +	0	76 +	.5	26 -	2.4
27 +	.1	77 +	.7	27 +	0	77 +	.9	27 +	1.2
28 +	.1	78 +	.8	28 +	0	78 +	1.0	28 +	2.9
29 +	.1	79 +	.9	29 +	0	79 +	1.2	29 +	5.9
30 +	.1	80 +	.9	30 +	0	80 +	1.2	30 +	.1
31 +	.1	81 +	1.0	31 +	0	81 +	.9		
32 +	.1	82 +	1.2	32 +	0	82 +	.9		
33 +	.1	83 +	1.3	33 +	0	83 +	.6	Seq. 5	
34 +	.1	84 +	.3	34 +	0	84 +	.6		
35 +	.1	85 +	.9	35 +	0	85 +	.8		
36 +	.1	86 +	.9	36 +	0	86 +	1.0		
37 +	.1	87 +	.9	37 +	0	87 +	1.4		
38 +	.1	88 +	.9	38 +	.2	88 +	1.0		
39 +	.5	89 +	1.0	39 +	.7	89 +	1.1		
40 +	.1	90 +	.4	40 +	0	90 +	.3		
41 +	.1	91 +	.2	41 +	0	91 +	.6		
42 +	0	92 -	.4	42 +	0	92 +	1.1		
43 +	0	93 +	.4	43 -	.1	93 +	1.3		
44 +	0	94 +	.2	44 -	.1	94 +	.2		
45 +	0	95 +	.1	45 -	.1	95 +	.2		
46 +	0	96 +	.1	46 -	.1	96 +	.2		
47 +	0	97 +	.1	47 -	.1	97 +	.4		
48 +	0	98 -	.7	48 -	.1	98 +	.6		
49 +	0	99 -	.7	49 -	.1	99 +	.6		
50 +	0	100 +	.3	50 -	.1	100 +	.1		

1679   .05   0°   .50   0   10.0   -2.5°   1.010   2031.8   .002243

a)
```
 1 + 0        51 +  .2
 2 + 0        52 +  .7
 3 + 0        53 +  .2
 4 + 0        54 +  .2
 5 + 0        55 ·  .2
 6 + 0        56 +  .2
 7 + 0        57 +  .2
 8 + 0        58 - 1.2
 9 + 0        59 - 1.2
10 + 0        60 +  .3
11 + 0        61 +  .3
12 - 0        62 +  .3
13 + 0        63 +  .3
14 + 0        64 +  .4
15 + 0        65 +  .4
16 + 0        66 +  .4
17 + 0        67 +  .2
18 + 0        68 +  .2
19 + 0        69 +  .3
20 + 0        70 -  .4
21 + 0        71 +  .2
22 + 0        72 -  .7
23 + 0        73 +  .2
24 + 0        74 +  .3
25 + 0        75 +  .3
26 +  .1      76 +  .3
27 +  .1      77 +  .6
28 +  .1      78 - 1.4
29 +  .1      79 + 1.5
30 +  .1      80 + 1.6
31 +  .1      81 + 1.3
32 +  .1      82 + 1.3
33 +  .1      83 + 1.4
34 +  .1      84 +  .2
35 +  .1      85 +  .5
36 +  .1      86 +  .6
37 +  .1      87 +  .7
38 +  .1      88 +  .6
39 + 1.0      89 -  .4
40 -  .1      90 -  .4
41 + 0        91 +  .2
42 + 0        92 -  .6
43 + 0        93 +  .5
44 + 0        94 +  .2
45 +  .1      95 +  .2
46 +  .1      96 +  .2
47 +  .1      97 +  .3
48 +  .1      98 - 1.0
49 +  .1      99 -  .7
50 +  .1     100 +  .3
```

b)
```
 1 + 0        51 +  .1
 2 + 0        52 +  .5
 3 + 0        53 +  .2
 4 + 0        54 +  .2
 5 + 0        55 +  .2
 6 + 0        56 +  .2
 7 + 0        57 - 1.2
 8 + 0        58 -  .8
 9 + 0        59 +  .3
10 + 0        60 +  .7
11 + 0        61 + 1.0
12 + 0        62 + 1.5
13 + 0        63 + 1.9
14 + 0        64 +  .5
15 + 0        65 +  .7
16 + 0        66 +  .8
17 + 0        67 +  .9
18 + 0        68 + 1.4
19 + 0        69 + 1.3
20 + 0        70 +  .4
21 + 0        71 +  .6
22 + 0        72 +  .5
23 + 0        73 +  .5
24 +  .5      74 -  .2
25 + 0        75 -  .7
26 + 0        76 -  .7
27 + 0        77 +  .2
28 + 0        78 +  .4
29 + 0        79 +  .6
30 + 0        80 +  .7
31 +  .1      81 +  .9
32 + 0        82 +  .9
33 + 0        83 +  .8
34 + 0        84 +  .8
35 + 0        85 +  .9
36 + 0        86 +  .8
37 + 0        87 +  .8
38 + 0        88 + 1.1
39 +  .3      89 + 1.3
40 + 0        90 +  .4
41 + 0        91 +  .4
42 + 0        92 +  .5
43 + 0        93 + 1.2
44 + 0        94 +  .3
45 + 0        95 +  .2
46 + 0        96 +  .2
47 + 0        97 +  .2
48 + 0        98 +  .2
49 + 0        99 +  .3
50 + 0       100 +  .2
```

c)
```
 1 +  .2
 2 +  .2
 3 - 1.4
 4 - 1.3
 5 - 1.2
 6 -  .3
 7 +  .3
 8 +  .6
 9 + 4.3
10 + 6.1
11 - 1.3
12 - 3.3
13 - 3.3
14 - 2.6
15 +  .2
16 -  .7
17 +  .8
18 + 6.4
19 + 9.3
20 +  .2
21 - 4.1
22 - 5.2
23 - 5.1
24 - 3.9
25 +  .2
26 - 1.8
27 + 1.4
28 + 3.8
29 + 6.0
30 +  .1
```

Seq. 5

1698 .05 0° .50 0 10.0 -2.5° 1.048 2031.8 .002173

a)				b)				c)		
1	+	.1	51	+	.1	1	+	.1	51	+	.1	1	-	.1

a)
```
 1 +  .1      51 +  .1         b) 1 +  .1      51 +  .1        c) 1 -  .1
 2 +  .2      52 +  .9            2 +  .1      52 +  .7            2 - 2.8
 3 +  .2      53 +  .8            3 +  .1      53 -  .2            3 - 6.8
 4 +  .2      54 +  .8            4 +  .1      54 +  .6            4 - 7.2
 5 +  .2      55 - 1.0            5 +  .1      55 -  .9            5 - 5.5
 6 +  .2      56 +  .2            6 +  .1      56 -  .2            6 -  .2
 7 +  .2      57 + 1.5            7 +  .1      57 +  .7            7 - 4.9
 8 +  .2      58 -  .8            8 +  .1      58 + 2.0            8 - 2.7
 9 +  .3      59 - 2.7            9 +  .1      59 + 3.7            9 -12.1
10 + 4.3      60 +  .2           10 +  .1      60 + 5.3           10 -28.1
11 +  .3      61 + 2.3           11 +  .7      61 + 7.2           11 -12.8
12 +  .4      62 + 1.8           12 + 0        62 + 7.8           12 -17.7
13 +  .4      63 - 1.9           13 +  .2      63 + 7.9           13 -19.6
14 +  .4      64 +  .1           14 + 1.9      64 + 3.0           14 -13.8
15 +  .4      65 + 2.5           15 + 0        65 + 3.8           15 +  .4
16 +  .5      66 + 1.7           16 +  .1      66 + 5.0           16 -10.4
17 +  .5      67 - 1.1           17 +  .1      67 + 6.2           17 - 6.2
18 +  .5      68 +  .1           18 +  .2      68 + 6.9           18 -29.8
19 +  .6      69 + 2.5           19 +  .2      69 + 7.1           19 -43.2
20 +  .6      70 + 2.2           20 +  .1      70 + 4.6           20 +  .1
21 +  .6      71 +  .2           21 + 0        71 + 4.7           21 -16.8
22 +  .6      72 +  .1           22 + 0        72 + 3.9           22 -24.0
23 +  .6      73 + 2.4           23 + 1.1      73 + 3.8           23 -22.5
24 +  .6      74 + 3.7           24 + 4.7      74 +  .1           24 -13.6
25 +  .6      75 + 3.3           25 + 0        75 +  .1           25 + 2.0
26 +  .6      76 + 3.1           26 + 0        76 +  .1           26 - 4.6
27 +  .2      77 + 3.6           27 +  .1      77 + 1.0           27 +14.0
28 +  .4      78 + 5.1           28 +  .5      78 + 1.5           28 +22.5
29 +  .3      79 + 5.5           29 + 1.6      79 + 2.2           29 -30.9
30 +  .5      80 + 5.4           30 + 2.6      80 + 2.7           30 +  .1
31 + 0        81 + 5.3           31 + 0        81 + 3.8
32 +  .1      82 + 5.2           32 + 0        82 + 4.1        Seq. 5
33 +  .1      83 + 5.6           33 + 0        83 + 4.2
34 +  .1      84 + 1.1           34 + 0        84 + 5.5
35 +  .2      85 + 2.7           35 + 0        85 + 5.6
36 +  .2      86 + 3.1           36 -  .6      86 + 5.4
37 +  .5      87 + 4.4           37 +  .1      87 + 5.3
38 +  .1      88 + 1.4           38 -  .7      88 + 7.1
39 +  .2      89 +  .1           39 + 0        89 + 8.4
40 +  .2      90 +  .1           40 + 0        90 + 4.7
41 +  .3      91 + 2.1           41 + 0        91 + 4.5
42 +  .1      92 +  .1           42 + 0        92 + 5.5
43 +  .2      93 + 3.9           43 + 0        93 + 8.2
44 +  .3      94 + 3.9           44 + 0        94 + 5.7
45 +  .3      95 + 3.9           45 + 0        95 + 3.2
46 +  .3      96 + 4.2           46 + 0        96 + 3.3
47 +  .1      97 + 3.0           47 + 0        97 + 2.4
48 +  .1      98 +  .1           48 + 0        98 + 2.8
49 +  .2      99 +  .1           49 + 0        99 + 3.8
50 +  .2     100 +  .1           50 + 0       100 + ..1
```

```
      1699   .05   0°    .50   0   10.0   0°   1.048  2031.8  .002173

a) 1 -  .1      51 +  .2     b) 1 +  .1      51 +  .1     c) 1 +  .2
   2 -  .1      52 + 1.6        2 + 0        52 +  .5        2 -10.4
   3 -  .1      53 +  .8        3 + 0        53 +  .2        3 -16.5
   4 -  .1      54 + 4.4        4 + 0        54 + 4.5        4 -15.4
   5 -  .1      55 + 2.1        5 + 0        55 + 4.8        5 - 9.4
   6 -  .1      56 + 2.1        6 +  .4      56 + 2.4        6 + 2.7
   7 -  .1      57 + 3.4        7 +  .6      57 + 3.8        7 - 3.8
   8 -  .1      58 + 2.1        8 +  .6      58 + 3.6        8 +11.8
   9 -  .1      59 +  .1        9 + 1.8      59 + 3.1        9 +26.1
  10 +  .6      60 + 1.1       10 + 1.1      60 + 2.7       10 +33.4
  11 -  .1      61 + 4.1       11 + 4.9      61 + 1.8       11 - 4.7
  12 -  .1      62 + 3.1       12 + 0        62 + 2.3       12 - 8.9
  13 -  .1      63 + 1.2       13 +  .4      63 + 2.9       13 -10.6
  14 -  .1      64 + 2.1       14 + 3.8      64 + 3.0       14 - 9.2
  15 -  .1      65 + 4.2       15 + 0        65 + 4.0       15 +  .7
  16 -  .1      66 + 2.7       16 +  .1      66 + 5.4       16 - 6.1
  17 -  .1      67 +  .2       17 +  .1      67 + 6.4       17 - 1.6
  18 -  .1      68 + 1.7       18 +  .1      68 + 7.3       18 +18.3
  19 -  .1      69 + 4.2       19 +  .2      69 + 6.7       19 +38.6
  20 -  .1      70 + 1.8       20 +  .2      70 + 4.8       20 +  .2
  21 -  .1      71 +  .1       21 +  .2      71 + 4.8       21 -10.8
  22 -  .1      72 + 1.0       22 +  .2      72 + 3.8       22 -17.1
  23 -  .1      73 + 3.7       23 +  .4      73 + 3.3       23 -16.6
  24 -  .1      74 + 2.5       24 + 3.5      74 + 3.4       24 -10.7
  25 -  .1      75 +  .1       25 + 0        75 + 4.1       25 + 1.6
  26 + 1.4      76 + 1.3       26 + 0        76 + 5.4       26 - 7.4
  27 -  .1      77 + 4.6       27 + 0        77 + 6.8       27 + 3.7
  28 -  .1      78 + 4.3       28 +  .1      78 + 6.4       28 +15.2
  29 -  .1      79 + 1.8       29 +  .1      79 + 6.4       29 +28.6
  30 -  .1      80 + 2.5       30 +  .3      80 + 5.0       30 +  .1
  31 -  .1      81 + 5.0       31 +  .1      81 + 3.9
  32 -  .1      82 + 6.1       32 + 0        82 + 4.0     Seq. 5
  33 -  .1      83 + 7.3       33 + 0        83 + 3.1
  34 -  .1      84 + 3.0       34 + 0        84 + 3.1
  35 -  .1      85 + 5.1       35 + 0        85 + 4.0
  36 -  .1      86 + 4.8       36 + 0        86 + 4.5
  37 -  .1      87 + 5.6       37 +  .1      87 + 6.9
  38 -  .1      88 + 4.1       38 +  .8      88 + 2.8
  39 -  .1      89 + 7.5       39 + 1.2      89 + 4.8
  40 -  .1      90 + 6.5       40 + 0        90 + 2.7
  41 -  .1      91 + 3.9       41 + 0        91 + 3.9
  42 -  .1      92 +  .3       42 + 0        92 + 6.9
  43 -  .1      93 + 5.0       43 + 0        93 + 5.6
  44 -  .1      94 + 3.5       44 + 0        94 + 2.7
  45 -  .1      95 + 4.0       45 + 0        95 + 2.3
  46 -  .1      96 + 4.8       46 + 0        96 + 3.3
  47 -  .1      97 + 3.1       47 + 0        97 + 3.6
  48 -  .1      98 +  .1       48 + 0        98 + 3.8
  49 -  .1      99 +  .1       49 + 0        99 + 4.1
  50 -  .1     100 +  .1       50 + 0       100 +  .1
```

1700 .05 0° .50 0 10.0 +2.5° 1.048 2031.8 .002173

a)			a)			b)			b)			c)		
1	+	.1	51	+	.1	1	+	0	51	+	.2	1	+	.2
2	+	.1	52	+	1.2	2	+	0	52	+	1.1	2	-	14.2
3	+	.1	53	+	.6	3	+	0	53	+	.3	3	-	23.0
4	-	.3	54	+	6.0	4	+	0	54	+	.6	4	-	20.2
5	+	.1	55	+	5.6	5	+	0	55	+	1.0	5	-	12.4
6	+	.1	56	+	5.0	6	+	0	56	+	.5	6	+	2.9
7	+	.1	57	+	3.7	7	-	.8	57	+	.4	7	-	3.6
8	+	.1	58	+	4.0	8	-	.9	58	+	.6	8	+	17.7
9	+	.1	59	+	3.1	9	-	1.0	59	+	1.3	9	+	31.9
10	+	1.3	60	+	3.5	10	+	.5	60	+	1.8	10	+	36.7
11	+	0	61	+	4.2	11	-	1.0	61	+	3.2	11	-	9.0
12	+	0	62	+	4.0	12	+	0	62	+	4.3	12	-	14.0
13	+	0	63	+	2.1	13	+	1.0	63	+	4.9	13	-	15.5
14	+	0	64	+	2.0	14	+	5.0	64	+	3.4	14	-	12.7
15	+	0	65	+	3.3	15	-	.1	65	+	4.2	15	+	.5
16	+	0	66	+	2.1	16	-	.1	66	+	5.4	16	-	8.3
17	+	0	67	-	.6	17	+	0	67	+	6.3	17	+	2.0
18	+	0	68	+	.2	18	+	0	68	+	7.2	18	+	22.7
19	+	0	69	+	2.7	19	+	0	69	+	6.9	19	+	36.4
20	+	0	70	+	.1	20	+	.1	70	+	5.3	20	+	.2
21	+	0	71	-	2.3	21	+	.1	71	+	5.1	21	-	4.0
22	+	0	72	-	1.7	22	+	.1	72	-	4.4	22	-	6.5
23	+	0	73	+	1.6	23	+	.1	73	+	3.3	23	-	7.1
24	+	0	74	+	.1	24	+	1.2	74	+	.3	24	-	6.4
25	+	0	75	-	2.9	25	-	.1	75	+	.5	25	-	1.7
26	+	0.1	76	-	1.0	26	-	.1	76	+	1.3	26	-	5.4
27	+	.1	77	+	2.7	27	-	.1	77	+	3.8	27	-	3.9
28	+	.1	78	+	.9	28	-	.1	78	+	4.8	28	+	4.8
29	+	.1	79	-	1.0	29	-	.1	79	+	6.9	29	+	20.6
30	+	.1	80	+	.6	30	-	.1	80	+	8.3	30	+	.2
31	+	.1	81	+	3.2	31	-	.1	81	+	8.5			
32	+	.1	82	+	4.7	32	-	.1	82	+	8.6			
33	+	.1	83	+	5.6	33	-	.1	83	+	7.6	Seq. 5		
34	+	.1	84	+	3.2	34	-	.1	84	+	4.5			
35	+	.1	85	+	6.2	35	-	.1	85	+	5.0			
36	+	.1	86	+	4.0	36	-	.1	86	+	5.2			
37	+	.1	87	+	4.5	37	-	.1	87	-	.9			
38	+	.1	88	+	1.2	38	-	.1	88	+	3.6			
39	+	0	89	+	4.4	39	-	.1	89	+	.2			
40	+	.1	90	+	9.1	40	-	.1	90	+	4.2			
41	+	0	91	+	7.6	41	-	.1	91	+	4.4			
42	+	0	92	+	.1	42	-	.1	92	+	5.5			
43	+	0	93	+	4.5	43	-	.1	93	+	2.7			
44	+	0	94	+	5.4	44	-	.1	94	+	1.8			
45	+	0	95	+	4.7	45	-	.1	95	+	3.0			
46	+	0	96	+	4.5	46	-	.1	96	+	3.7			
47	+	0	97	+	2.6	47	-	.1	97	+	3.2			
48	+	0	98	+	.1	48	-	.1	98	+	3.4			
49	+	0	99	+	.1	49	-	.1	99	+	4.2			
50	+	0	100	+	.1	50	-	.1	100	+	.2			

1710 .05 0° .40 0 10.0 +2.5° 1.010 2029.7 .002202

a)				b)				c)	
1 − .1		51 + .1		1 + 0		51 + .1		1 + .1	
2 − .1		52 + .8		2 + 0		52 + .7		2 − 4.4	
3 − .1		53 + .4		3 + 0		53 − .2		3 − 6.6	
4 − .1		54 + 1.8		4 + 0		54 + .3		4 − 5.8	
5 − .1		55 + 1.9		5 + 0		55 + .3		5 − 4.6	
6 − .1		56 + 1.2		6 + 0		56 + .2		6 + .2	
7 − .1		57 + .6		7 + 0		57 − 1.0		7 − 1.1	
8 − .1		58 + .6		8 + 0		58 − .2		8 + 1.5	
9 − .1		59 − .2		9 + 0		59 + .2		9 + 5.1	
10 − 0		60 − .6		10 + 0.4		60 − .2		10 + 5.9	
11 − .1		61 + 1.1		11 + 0		61 + .2		11 − 1.4	
12 − .1		62 + 1.4		12 + .1		62 + .7		12 − 3.4	
13 − .1		63 + 1.3		13 + .1		63 + 1.3		13 − 3.7	
14 − .1		64 + 1.1		14 + 1.3		64 + 1.3		14 − 3.2	
15 − .1		65 + 1.1		15 + 0		65 + 1.2		15 − .4	
16 − .1		66 + .9		16 + 0		66 + 1.3		16 − 1.3	
17 − .1		67 + .2		17 + 0		67 + 1.6		17 + .7	
18 − .1		68 − .5		18 + 0		68 − 2.0		18 + 3.2	
19 − .1		69 + .3		19 + 0		69 + 1.6		19 + 5.7	
20 − .1		70 − .2		20 + 0		70 − .2		20 − .1	
21 − .1		71 − .9		21 + 0		71 − .4		21 − 3.4	
22 − .1		72 − .5		22 + 0		72 + .2		22 − 3.6	
23 − .1		73 − .7		23 + 0		73 + .2		23 − 3.6	
24 − .1		74 − .4		24 − .1		74 + .1		24 − 3.6	
25 − .1		75 − .8		25 + 0		75 + .1		25 − 3.0	
26 − .1		76 + .2		26 + 0		76 − .2		26 − 2.9	
27 − .1		77 + .9		27 + 0		77 − 1.3		27 − 2.6	
28 − .1		78 − .8		28 + 0		78 + 2.1		28 + .1	
29 − .1		79 + .6		29 + 0		79 + 2.5		29 + 1.8	
30 − .1		80 + .6		30 + 0		80 − 2.5		30 + .1	
31 − .1		81 + 1.4		31 + 0		81 − 1.8			
32 − .1		82 − 1.7		32 + 0		82 − 1.8		Seq. 5	
33 − .1		83 − 1.8		33 + 0		83 − .9			
34 − .1		84 + .4		34 + 0		84 + .9			
35 − .1		85 + .7		35 + 0		85 + 1.1			
36 − .1		86 + .8		36 + 0		86 + 1.0			
37 − .1		87 + .9		37 + 0		87 + .1			
38 − .1		88 − .6		38 + 0		88 + .4			
39 − .1		89 + .9		39 + 0		89 − .1			
40 − .1		90 + 1.6		40 + 0		90 + .4			
41 − .1		91 + .5		41 + 0		91 − .6			
42 − .1		92 + .2		42 + 0		92 − .7			
43 − .1		93 + .5		43 + 0		93 + .3			
44 − .1		94 − .2		44 + 0		94 − .1			
45 − .1		95 + .2		45 + 0		95 + .1			
46 − .1		96 + .2		46 + 0		96 − .3			
47 − .1		97 + .4		47 + 0		97 − .4			
48 − .1		98 − 1.1		48 + 0		98 − .4			
49 − .1		99 + .2		49 + 0		99 − .5			
50 − .1		100 + .2		50 + 0		100 + .1			

1711 .05 0° .40 0 10.0 0° 1.010 2029.7 .002202

a)				b)				c)	
1 −	.1	51 +	.2	1 +	0	51 +	.1	1 +	.2
2 −	.1	52 +	.5	2 +	0	52 +	.4	2 −	2.5
3 −	.1	53 +	.2	3 +	0	53 +	.1	3 −	4.1
4 −	.1	54 +	.8	4 +	0	54 +	.9	4 −	4.0
5 −	.1	55 +	.7	5 +	0	55 +	1.2	5 −	3.3
6 −	.1	56 +	.7	6 +	0	56 +	.9	6 +	.2
7 −	.1	57 +	.4	7 +	0	57 +	.7	7 +	.2
8 −	.1	58 ·	.1	8 +	0	58 +	.7	8 +	.6
9 −	.1	59 ·	.1	9 +	0	59 +	.5	9 +	5.2
10 +	.5	60 +	.4	10 +	0	60 +	.5	10 +	6.2
11 −	.1	61 +	.8	11 ·	.6	61 +	.5	11 −	.8
12 −	.1	62 +	.9	12 +	0	62 +	.4	12 −	2.7
13 −	.1	63 +	1.3	13 +	0	63 +	.9	13 −	3.5
14 −	.1	64 +	1.2	14 +	.7	64 +	1.2	14 −	3.4
15 −	.1	65 +	1.2	15 +	0	65 +	1.3	15 +	.2
16 −	.1	66 +	1.1	16 +	0	66 +	1.3	16 +	.2
17 −	.1	67 +	1.0	17 +	0	67 +	1.4	17 +	2
18 −	.1	68 +	.9	18 ·	0	68 +	1.5	18 +	3.4
19 −	.1	69 +	1.0	19 ·	0	69 +	1.3	19 +	7.1
20 −	.1	70 +	.2	20 +	0	70 +	.1	20 +	.1
21 −	.1	71 +	.2	21 ·	0	71 +	.1	21 −	5.1
22 −	.1	72 +	.2	22 ·	0	72 +	.1	22 −	5.8
23 −	.1	73 +	.3	23 ·	0	73 +	.1	23 −	5.7
24 −	.1	74 +	.5	24 +	.0	74 +	.3	24 −	5.3
25 −	.1	75 +	.1	25 +	.1	75 +	.5	25 −	.8
26 −	.1	76 +	.1	26 ·	0	76 +	.0	26 −	4.6
27 −	.1	77 +	.6	27 +	0	77 +	.9	27 +	.2
28 −	.1	78 +	1.0	28 ·	0	78 −	.7	28 +	.8
29 −	.1	79 +	1.1	29 +	0	79 +	1.3	29 +	3.4
30 −	.1	80 +	1.2	30 +	0	80 +	.6	30 +	.2
31 −	.1	81 +	1.2	31 +	0	81 +	.5		
32 −	.1	82 +	1.6	32 +	0	82 +	.8		
33 −	.1	83 +	1.7	33 +	0	83 +	.1	Seq. 5	
34 −	.1	84 +	.2	34 +	0	84 +	3		
35 −	.1	85 −	.6	35 +	0	85 +	.6		
36 −	.1	86 +	.7	36 +	0	86 +	.7		
37 −	.1	87 +	.9	37 +	0	87 +	1.3		
38 −	.1	88 +	1.2	38 +	0	88 +	.0		
39 −	.1	89 +	1.4	39 +	.3	89 +	.4		
40 −	.1	90 +	.6	40 +	.1	90 +	.4		
41 −	.1	91 +	.2	41 +	.1	91 +	.4		
42 −	.1	92 +	.2	42 +	0	92 +	1.0		
43 −	.1	93 +	.4	43 +	0	93 +	.1		
44 −	.1	94 +	.1	44 +	0	94 +	.2		
45 −	.1	95 +	.1	45 +	0	95 +	.2		
46 −	.1	96 +	.2	46 +	0	96 +	.2		
47 −	.1	97 +	.2	47 +	0	97 +	.2		
48 −	.1	98 −	1.2	48 +	0	98 +	.2		
49 −	.1	99 +	.2	49 +	0	99 +	.3		
50 −	.1	100 +	.2	50 +	0	100 +	.2		

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          1712   .05   0°   .40   0   10.0   -2.5°   1.010   2029.7   .002202
```

a)						b)					c)		
1	−	.2	51	+	.1	1	+	0	51	+	.1	1	+	.2
2	−	.2	52	+	.5	2	+	.3	52	+	.3	2	+	.2
3	−	.2	53	+	.3	3	+	.1	53	+	.3	3	−	.8
4	−	.2	54	+	.6	4	·	0	54	·	.3	4	−	.8
5	−	.2	55	·	.2	5	+	0	55	+	.4	5	−	.8
6	−	.2	56	·	.2	6	+	0	56	·	.2	6	+	.5
7	−	.2	57	·	.2	7	+	0	57	·	.2	7	+	.5
8	−	.2	58	·	.1	8	+	0	58	·	.3	8	+	.5
9	−	.2	59	−	.8	9	+	0	59	+	.5	9	+	1.9
10	+	.4	60	·	.1	10	+	0	60	+	.8	10	+	4.8
11	−	.1	61	+	.6	11	+	.3	61	·	.9	11	−	1.7
12	−	.2	62	+	.8	12	+	.1	62	·	.9	12	−	2.9
13	−	.1	63	·	.8	13	+	0	63	·	1.2	13	−	3.4
14	−	.1	64	·	.8	14	·	.4	64	+	1.2	14	−	2.1
15	−	.1	65	·	.8	15	+	.1	65	·	1.2	15	·	.5
16	−	.1	66	·	.9	16	+	0	66	·	1.2	16	−	.7
17	−	.1	67	·	.3	17	+	0	67	·	1.4	17	+	.9
18	−	.1	68	·	.3	18	+	0	68	+	1.6	18	·	5.2
19	−	.1	69	·	.6	19	+	0	69	+	1.7	19	+	7.5
20	−	.1	70	·	.2	20	+	0	70	·	.2	20	+	.1
21	−	.1	71	±	.2	21	+	0	71	+	.2	21	−	4.7
33	−	.1	72	−	.1	22	+	0	72	·	.2	22	−	6.4
23	−	.1	73	·	.3	23	+	0	73	+	.2	23	−	5.7
24	−	.1	74	+	.5	24	+	1.4	74	−	.1	24	−	4.7
25	+	0	75	+	.2	25	+	.1	75	−	.7	25	−	1.2
26	+	0	76	+	.2	26	+	0	76	−	.7	26	−	3.2
27	+	0	77	·	.7	27	+	0	77	·	.3	27	+	.7
28	+	0	78	+	1.2	28	+	0	78	+	.3	28	+	1.8
29	+	0	79	+	1.5	29	+	0	79	·	.3	29	+	5.4
30	+	0	80	·	1.7	30	+	.5	80	+	.4	30	+	.1
31	+	0	81	−	1.4	31	·	.1	81	·	.5			
32	+	0	82	+	1.7	32	+	0	82	·	.7	Seq. 5		
33	+	0	83	+	1.3	33	+	0	83	+	.6			
34	+	0	84	+	.2	34	+	0	84	+	.8			
35	+	0	85	+	.3	35	+	0	85	+	.8			
36	+	0	86	·	.5	36	+	0	86	+	.8			
37	+	0	87	·	1.1	37	+	0	87	+	1.3			
38	+	0	88	·	.9	38	+	0	88	+	1.3			
39	+	0	89	+	.2	39	+	0	89	+	1.3			
40	+	0	90	+	.1	40	+	0	90	+	.2			
41	+	0.	91	+	.1	41	+	0	91	+	.3			
42	+	0	92	+	.2	42	+	0	92	+	.9			
43	+	0	93	·	.5	43	+	0	93	+	1.1			
44	+	0	94	·	.4	44	+	0	94	+	.1			
45	+	0	95	·	.4	45	+	0	95	+	.1			
46	+	0	96	·	.4	46	+	0	96	+	.1			
47	+	0	97	·	.4	47	+	0	97	+	.1			
48	+	0	98	+	.1	48	+	0	98	+	.1			
49	+	0	99	·	.1	49	+	0	99	+	.2			
50	+	0	100	+	.1	50	+	0	100	+	.2			

1728   .05   0°   .40   0   10.0   +2.5°   1.049   2026.2   .002121

a)
1 + 0	51 + .1	b) 1 + 0	51 + .2
2 + 0	52 + 1.0	2 + 0	52 + 1.3
3 + 0	53 + .1	3 + 0	53 + 1.0
4 - 1.6	54 + 8.1	4 + .1	54 + .3
5 + .1	55 + 6.5	5 + .2	55 + .5
6 + .1	56 + 5.7	6 + .2	56 - .6
7 + 1	57 + 5.0	7 + .2	57 - 1.7
8 + .1	58 + 5.2	8 + .2	58 - .5
9 + .1	59 + 2.9	9 + .1	59 + .5
10 + 1.8	60 + 3.9	10 + 3.9	60 + 1.3
11 + 0	61 + 5.5	11 + 1.2	61 + 2.7
12 + 0	62 + 4.3	12 + .1	62 + 4.1
13 + 0	63 + 1.3	13 + 1.7	63 + 5.1
14 + 0	64 + 2.2	14 - 8.0	64 + 4.4
15 + 0	65 + 4.9	15 + .1	65 + 5.5
16 + 0	66 + 2.0	16 + .2	66 + 7.4
17 + 0	67 - 1.1	17 + .2	67 + 8.5
18 + 0	68 + .7	18 + .2	68 + 8.9
19 + 0	69 + 4.4	19 + .2	69 + 7.3
20 + 0	70 + .8	20 + .2	70 + 4.7
21 + 0	71 - 2.1	21 + .2	71 + 4.0
22 + 0	72 + .2	22 + .2	72 + 2.9
23 + 0	73 + 4.3	23 + .2	73 + 2.8
24 + 0	74 + 1.2	24 + 1.8	74 + 1.0
25 + 0	75 - 2.2	25 + 0	75 + 1.6
26 + 0	76 + 1.0	26 + 0	76 + 3.7
27 + 0	77 + 5.5	27 + 0	77 + 7.4
28 + 0	78 + 1.2	28 + 0	78 + 9.3
29 + 0	79 - .8	29 + 0	79 +10.5
30 + 0	80 + 2.3	30 + 0	80 +10.0
31 + 0	81 + 6.5	31 + 0	81 + 6.3
32 + 0	82 + 7.2	32 + 0	82 + 5.9
33 + 0	83 + 8.7	33 + 0	83 + 5.0
34 + 0	84 + 3.1	34 + 0	84 + 5.6
35 + 0	85 + 3.7	35 + 0	85 + 6.5
36 + 0	86 + 2.9	36 + 0	86 + 6.8
37 + 0	87 + 5.0	37 + 0	87 - 1.5
38 + 0	88 + 1.7	38 + 0	88 + 2.7
39 + 0	89 + 8.9	39 + 0	89 - 1.0
40 + 0	90 + 9.7	40 - .4	90 + 5.1
42 + 0	91 + 4.3	41 + .2	91 + 6.3
42 + 0	92 + .1	42 + .2	92 + 6.7
43 + 0	93 + 5.2	43 + .2	93 + 1.6
44 + 0	94 + 4.2	44 + .2	94 + .9
45 + 0	95 + 4.0	45 + .2	95 + 3.1
46 + 0	96 + 5.4	46 + .2	96 + 5.1
47 + 0	97 + 3.8	47 + .2	97 + 3.6
48 + 0	98 + .1	48 + .2	98 + 4.1
49 + 0	99 + .1	49 + .2	99 + 5.8
50 + 0	100 + .1	50 + .2	100 + .1

c)
1 + .2
2 -11.8
3 -19.2
4 -16.8
5 - 8.7
6 + 5.4
7 - 1.6
8 +18.3
9 +32.7
10 +39.7
11 - 6.2
12 -10.8
13 -12.6
14 - 9.3
15 + 4.2
16 - 5.7
17 + 5.7
18 +26.1
19 +40.2
20 + 1.9
21 + .1
22 - 3.1
23 - 3.4
24 - 1.9
25 + 1.2
26 - .7
27 - .6
28 + 7.1
29 +23.5
30 + .2

Seq. 5

1729 :05 0° .40 0 10.0 0° 1.048 2026.2 .002121

a)				b)				c)	
1	+ .1	51	- .2	1	+ 0	51	- .1	1	+ .2
2	+ .1	52	- 1.5	2	+ .2	52	+ 1.0	2	- 8.2
3	+ .1	53	- .5	3	+ .3	53	- .3	3	- 13.4
4	+ .1	54	- 4.3	4	+ .3	54	- 5.6	4	- 12.9
5	+ 0	55	- 2.9	5	+ .4	55	+ 7.0	5	- 7.7
6	+ 0	56	+ 3.4	6	+ .4	56	+ 3.7	6	+ 4.1
7	+ 0	57	- 4.1	7	+ .4	57	+ 4.9	7	- 5.1
8	+ 0	58	- 3.2	8	+ .4	58	- 5.1	8	+ 8.6
9	+ 0	59	+ 1.4	9	+ 1.4	59	+ 3.4	9	+ 25.6
10	+ 3.8	60	+ 2.6	10	- 1.5	60	- 3.1	10	+ 35.5
11	+ 0	61	- 4.8	11	+ 5.9	61	- 2.5	11	- 5.5
12	+ 0	62	+ 4.4	12	+ 0	62	- 2.9	12	- 10.5
13	+ 0	63	- 2.9	13	+ 1.0	63	+ 3.6	13	- 11.7
14	+ 0	64	- 3.5	14	- 7.5	64	- 5.7	14	- 9.7
15	+ 0	65	- 4.9	15	+ .3	65	- 6.5	15	+ 3.3
16	+ 0	66	- 3.9	16	+ .4	66	- 6.9	16	- 6.0
17	+ 0	67	+ 2.1	17	.4	67	- 6.9	17	+ 3.3
18	+ 0	68	- 3.6	18	- .5	68	- 5.6	18	- 24.6
19	+ 0	69	- 4.9	19	- .8	69	+ 3.7	19	+ 40.1
20	+ 0	70	- 3.1	20	- .2	70	- 1.5	20	- 1.2
21	+ 0	71	+ 1.0	21	- .3	71	- 1.7	21	- 8.6
22	+ 0	72	- 2.8	22	+ .4	72	- 1.8	22	- 14.7
23	+ 0	73	+ 4.3	23	+ .7	73	- 2.1	23	- 14.1
24	+ 0	74	+ 3.9	24	- 6.5	74	4.6	24	- 8.6
25	+ 0	75	+ 1.0	25	+ .2	75	- 5.9	25	+ 3.4
26	+ 0	76	+ 2.7	26	+ .3	76	- 6.1	26	- 6.5
27	+ 0	77	+ 4.9	27	+ .3	77	- 6.3	27	+ 6.2
28	+ 0	78	+ 5.0	28	+ .4	78	- 5.1	28	+ 16.5
29	+ 0	79	- 3.3	29	+ .4	79	+ 5.1	29	+ 28.8
30	+ 0	80	+ 4.1	30	+ .9	80	- 2.8	30	+ .2
31	+ 0	81	+ 5.3	31	+ .8	81	- 2.9		
32	+ 0	82	+ 6.1	32	+ .8	82	- 3.1	Seq. 5	
33	+ 0	83	+ 6.6	33	+ .1	83	- 3.2		
34	+ 0	84	+ 1.3	34	+ .6	84	+ 3.7		
35	+ 0	85	+ 2.6	35	- .6	85	- 4.5		
36	+ 0	86	+ 3.8	36	+ .6	86	+ 4.7		
37	+ 0	87	+ 5.0	37	+ .6	87	- 6.0		
38	+ 0	88	+ 6.2	38	+ .9	88	+ 2.5		
39	+ 0	89	+ 6.2	39	+ 1.8	89	+ 2.7		
40	+ 0	90	+ 1.9	40	+ .1	90	- 2.9		
41	+ 0	91	+ 1.9	41	+ .1	91	+ 4.1		
42	+ 0	92	+ .1	42	+ .1	92	+ 6.3		
43	+ 0	93	- 4.4	43	+ .1	93	+ 2.6		
44	+ 0	94	+ 2.9	44	+ .1	94	- 1.6		
45	+ 0	95	+ 3.2	45	+ .1	95	+ 2.6		
46	+ 0	96	+ 4.2	46	+ .1	96	- 3.8		
47	+ 0	97	+ 2.6	47	+ .1	97	+ 3.9		
48	+ 0	98	+ .1	48	+ .1	98	+ 4.1		
49	+ 0	99	+ .1	49	+ .1	99	+ 4.5		
50	+ 0.	100	+ .1	50	+ .1	100	+ .1		

1730 .05 0° .40 0 10.0 -2.5° 1.049 2026.2 .002121

a)				b)				c)	
1 +	.1	51 +	.1	1 +	0	51 -	.1	1 +	.1
2 +	.1	52 -	1.0	2 +	0	52 +	.3	2 -	.6
3 +	.1	53 +	.7	3 +	0	53 +	.6	3 -	5.1
4 +	.1	54 +	2.9	4 +	0	54 +	1.1	4 -	5.0
5 +	.1	55 -	.8	5 +	0	55 -	2.3	5 -	4.6
6 -	.1	56 +	1.5	6 +	0	56 -	1.5	6 +	.6
7 +	.1	57 -	5.0	7 +	0	57 +	4.0	7 -	1.7
8 +	.1	58 +	1.7	8 +	0	58 +	6.9	8 -	.9
9 +	.1	59 -	.9	9 +	0	59 +	8.1	9 +	13.7
10 +	3.0	60 -	1.3	10 +	.1	60 +	8.4	10 +	29.8
11 +	0	61 -	5.7	11 +	1.8	61 +	6.8	11 -	11.8
12 +	0	62 +	3.0	12 +	0	62 +	6.2	12 -	17.8
13 +	0	63 +	.1	13 +	.3	63 +	6.2	13 -	18.5
14 +	0	64 +	1.8	14 +	.2	64 +	4.0	14 -	13.0
15 +	0	65 +	5.9	15 +	0	65 +	5.3	15 +	1.7
16 +	0	66 -	2.8	16 +	.1	66 +	7.2	16 -	7.6
17 +	0	67 -	.6	17 +	.1	67 +	8.3	17 +	9.6
18 +	0	68 -	1.7	18 +	.2	68 +	8.7	18 -	31.5
19 +	0	69 +	5.6	19 +	.3	69 +	6.9	19 +	43.1
20 +	0	70 -	3.2	20 +	.3	70 -	3.5	20 +	.2
21 +	0	71 +	.4	21 +	.1	71 +	2.7	21 -	15.3
22 +	0	72 -	1.3	22 +	.1	72 +	2.1	22 -	21.5
23 +	0	73 +	5.6	23 +	1.9	73 +	2.1	23 -	20.2
24 +	0	74 +	5.2	24 +	7.5	74 -	.5	24 -	12.6
25 +	0	75 +	3.2	25 +	.1	75 -	1.4	25 +	3.6
26 +	0	76 -	3.6	26 +	.2	76 -	1.4	26 -	4.8
27 +	0	77 +	6.1	27 +	.3	77 +	.2	27 +	13.2
28 +	0	78 -	7.2	28 +	.9	78 +	.2	28 +	22.2
29 +	0	79 +	7.2	29 +	2.2	79 +	1.0	29 -	32.6
30 +	0	80 -	7.0	30 +	4.5	80 +	1.7	30 +	.1
31 +	0	81 +	7.0	31 +	0	81 +	2.9		
32 +	0	82 +	7.4	32 +	.1	82 +	3.8		
33 +	0	83 -	6.7	33 +	.2	83 -	4.0		
34 +	0	84 +	.9	34 +	.2	84 +	4.1		
35 +	0	85 -	2.0	35 +	.2	85 +	5.3		
36 +	0	86 +	4.0	36 +	0	86 +	5.6		
37 +	0	87 +	6.1	37 +	.1	87 +	9.0		
38 +	0	88 +	2.8	38 +	.1	88 +	3.5		
39 +	0	89 -	.8	39 +	.1	89 +	9.0		
40 +	0	90 -	.8	40 +	.1	90 +	2.8		
41 +	0	91 +	2.3	41 +	.1	91 +	4.8		
42 +	0	92 +	.1	42 +	.1	92 +	9.3		
43 +	0	93 -	6.3	43 +	.1	93 +	8.4		
44 +	0	94 +	4.5	44 +	.1	94 +	2.2		
45 +	0	95 +	5.1	45 +	.1	95 +	2.3		
46 +	0	96 +	5.7	46 +	.1	96 +	4.3		
47 +	0	97 +	3.6	47 +	.1	97 +	2.2		
48 +	0	98 +	.1	48 +	.1	98 +	3.7		
49 +	0	99 +	.1	49 +	.1	99 +	5.2		
50 +	0	100 +	.1	50 +	.1	100 +	.1		

Seq. 5

1743   .05   0°   .35   0   10.0   +2.5°   1.010   2026.9   .002259

a)

#		val	#		val
1	+	.1	51	-	.1
2	-	.1	52	+	1.0
3	+	.1	53	+	.5
4	+	.1	54	+	2.5
5	-	.1	55	+	1.7
6	+	.1	56	+	1.3
7	+	.1	57	+	.7
8	+	.1	58	+	.8
9	+	.1	59	+	.2
10	+	3.9	60	+	.5
11	-	0	61	+	1.0
12	+	0	62	+	1.4
13	+	0	63	+	.9
14	+	0	64	+	.9
15	+	0	65	+	1.1
16	+	0	66	-	.6
17	+	0	67	-	.2
18	+	0	68	+	.9
19	+	0	69	+	1.3
20	+	0	70	+	.1
21	+	0	71	+	.1
22	+	0	72	+	.1
23	+	0	73	+	.7
24	-	0	74	+	.2
25	+	0	75	-	1.3
26	+	0	76	+	.2
27	+	0	77	+	1.5
28	+	0	78	+	.8
29	+	0	79	+	.6
30	-	0	80	+	.7
31	+	0	81	+	1.5
32	+	0	82	+	2.0
33	+	0	83	+	2.2
34	+	0	84	+	.4
35	+	0	85	+	.5
36	+	0	86	+	.7
37	+	0	87	+	1.2
38	+	0	88	+	.4
39	+	0	89	+	1.9
40	+	0	90	+	1.2
41	-	0	91	+	.2
42	+	0	92	+	.1
43	+	0 ·	93	+	.9
44	+	C	94	+	.2
45	+	0	95	+	.2
46	+	0	96	+	.2
47	+	0	97	+	.4
48	+	0	98	-	.9
49	+	0	99	-	.5
50	+	0	100	+	.2

b)

#		val	#		val
1	+	0	51	+	.1
2	+	0	52	+	.8
3	+	0	53	+	.2
4	+	0	54	+	.6
5	+	0	55	+	.8
6	+	0	56	+	.1
7	+	0	57	-	1.1
8	+	0	58	-	.7
9	+	0	59	-	.4
10	+	.6	60	+	.2
11	+	.1	61	+	.5
12	+	.1	62	+	1.3
13	+	.1	63	+	1.7
14	+	.3	64	+	1.3
15	+	0	65	+	1.3
16	+	0	66	+	1.5
17	+	0	67	+	1.9
18	+	0	68	+	2.4
19	+	0	69	+	1.6
20	+	0	70	+	.1
21	+	0	71	-	.3
22	+	0	72	+	.2
23	+	0	73	+	.2
24	+	0	74	+	.2
25	+	0	75	+	.2
26	+	0	76	+	.6
27	+	0	77	+	2.1
28	+	0	78	+	2.7
29	+	0	79	+	3.1
30	+	0	80	+	2.1
31	+	0	81	+	1.1
32	+	0	82	+	1.3
33	+	0	83	+	.7
34	+	0	84	-	1.1
35	+	0	85	+	1.7
36	+	0	86	+	1.6
37	+	0	87	-	.3
38	+	0	88	+	.6
39	+	0	89	+	.1
40	+	0	90	+	.6
41	+	0	91	+	1.1
42	+	0	92	+	1.3
43	+	0	93	+	.2
44	+	0	94	+	.2
45	+	0	95	+	2
46	+	0	96	+	.8
47	+	0	97	+	.5
48	+	0	98	+	.7
49	+	0	99	+	1.2
50	+	0	100	+	.1

c)

#		val
1	+	.2
2	-	3.0
3	-	4.4
4	-	3.6
5	-	2.3
6	+	.6
7	-	.5
8	+	3.6
9	+	7.8
10	+	9.1
11	+	.1
12	-	1.2
13	-	2.3
14	-	1.3
15	+	.6
16	+	.3
17	+	1.7
18	+	6.3
19	+	9.3
20	+	.2
21	+	.2
22	-	1.0
23	-	1.3
24	-	1.1
25	-	.2
26	-	.7
27	+	.5
28	+	1.5
29	+	5.5
30	+	.1

Seq. 5

1744 .05 0° .35 0 10.0 0° 1.010 2026.9 .002259

a)
#		val	#		val
1	+	.1	51	·	.1
2	+	.1	52	·	.8
3	·	.1	53	+	.2
4	+	.1	54	·	1.2
5	+	.1	55	·	.9
6	·	.1	56	·	.4
7	+	.1	57	·	.2
8	+	.1	58	·	.2
9	+	.1	59	·	2
10	+	1.7	60	·	.2
11	+	.1	61	·	.7
12	+	.1	62	·	1.0
13	·	.1	63	·	1.2
14	·	.1	64	·	1.
15	+	.1	65	·	1.
16	+	.1	66	·	1.
17	+	.1	67	·	.
18	·	.1	68	·	.
19	·	.1	69	·	1.0
20	·	.1	70	·	.1
21	+	.1	71	·	1
22	+	.1	72	·	1
23	+	.1	73	·	3
24	·	.1	74	·	.4
25	·	.1	75	·	.1
26	+	.1	76	·	.1
27	+	.1	77	·	.
28	+	.1	78	·	1.0
29	+	.1	79	·	1.0
30	·	1	80	·	1.1
31	·	1	81	+	1.2
32	·	.1	82	·	1.5
33	+	.1	83	-	1.5
34	+	.1	84	·	1
35	+	.1	85	+	4
36	+	.1	86	·	.5
37	+	.1	87	·	.9
38	+	.1	88	·	1.2
39	+	.1	89	·	1.0
40	+	.1	90	·	.2
41	+	.1	91	·	.2
42	+	.1	92	+	.2
43	+	.1	93	·	.3
44	+	.1	94	·	.2
45	+	.1	95	·	.1
46	+	.1	96	+	.1
47	+	.1	97	+	.2
48	+	.1	98	+	.1
49	·	.1	99	+	.1
50	+	.1	100	+	.1

b)
#		val	#		val
1	+	.1	51	·	.2
2	+	1	52	+	.8
3	+	.1	53	+	.2
4	·	.1	54	·	1.6
5	·	0	55	·	2.0
6	·	0	56	·	1.0
7	·	0	57	·	.8
8	·	0	58	·	.9
9	+	0	59	+	.7
10	·	0	60	·	.8
11	·	.1	61	·	.
12	·	0	62	·	.
13	·	0	63	+	1.2
14	·	.1	64	·	1.4
15	·	0	65	·	.4
16	·	0	66	·	1.
17	·	0	67	·	1.7
18	·	0	68	·	1.7
19	·	0	69	·	.8
20	+	0	70	·	.1
21	·	0	71	·	.1
22	·	0	72	·	.
23	+	0	73	·	.
24	·	.3	74	·	1.1
25	·	1	75	·	7
26	·	1	76	·	.
27	·	.1	77	·	1.1
28	·	.1	78	·	1.2
29	·	.1	79	·	1.2
30	·	.1	80	·	1.2
31	·	.1	81	·	1.0
32	·	.1	82	·	1.0
33	·	.1	83	+	.9
34	·	.1	84	+	.8
35	·	.1	85	·	9
36	·	1	86	+	.9
37	·	.1	87	+	1.4
38	+	.1	88	+	.9
39	·	.1	89	+	4
40	·	.1	90	·	.4
41	·	.1	91	+	.4
42	·	0	92	+	1.0
43	·	0	93	+	.5
44	·	0	94	·	.2
45	·	0	95	·	.2
46	+	0	96	·	2
47	+	0	97	+	.2
48	+	0	98	·	.2
49	·	0	99	·	.4
50	+	0	100	+	.2

c)
#		val
1	·	.2
2	-	1.9
3	-	3.6
4	-	3.5
5	-	2.5
6	+	.3
7	-	1.1
8	+	1.0
9	·	5.0
10	·	7.5
11	-	1.3
12	-	1.8
13	-	2.8
14	-	2.3
15	-	.2
16	-	1.3
17	-	.8
18	·	4.9
19	·	7.5
20	·	.2
21	-	3.5
22	-	4.9
23	-	4.4
24	-	3.8
25	+	.2
26	-	3.1
27	·	.3
28	+	1.8
29	·	4.2
30	·	1

Seq.5

```
a)  1 +  0      51 +  .2     b)  1 +  0      51 +  .2     c)  1 +  .2
    2 +  0      52 +  .9         2 +  0      52 +  .6         2 +  .1
    3 +  0      53 +  .1         3 +  0      53 +  .2         3 - 1.9
    4 +  0      54 + 1.0         4 +  0      54 +  .8         4 - 1.9
    5 -  .1     55 +  .8         5 +  0      55 + 1.1         5 - 1.7
    6 -  .1     56 +  .7         6 +  0      56 +  .7         6 +  .3
    7 -  .1     57 +  .7         7 +  0      57 +  .7         7 +  .3
    8 -  .1     58 +  .6         8 +  0      58 + 1.2         8 +  .3
    9 -  .1     59 - 1.1         9 +  0      59 + 1.4         9 + 2.8
   10 -  .1     60 +  .2        10 +  0      60 + 1.6        10 + 5.5
   11 -  .1     61 + 1.0        11 +  0      61 +  .5        11 - 2.9
   12 -  .1     62 + 1.2        12 +  0      62 + 1.1        12 - 4.1
   13 -  .1     63 + 1.2        13 +  0      63 + 1.3        13 - 4.1
   14 -  .1     64 + 1.2        14 +  0      64 + 1.3        14 - 3.6
   15 -  .1     65 + 1.2        15 +  0      65 + 1.3        15 -  .7
   16 -  .1     66 + 1.2        16 +  0      66 + 1.5        16 - 2.5
   17 -  .1     67 +  .4        17 +  0      67 + 1.7        17 +  .9
   18 -  .1     68 +  .7        18 +  0      68 + 2.0        18 + 6.1
   19 -  .1     69 + 1.0        19 +  0      69 + 1.5        19 + 8.0
   20 -  .1     70 +  .1        20 +  0      70 +  .1        20 +  .1
   21 -  .1     71 +  .1        21 +  0      71 +  .1        21 - 4.6
   22 -  .1     72 +  .1        22 +  0      72 +  .1        22 - 6.3
   23 -  .1     73 +  .4        23 +  0      73 +  .1        23 - 5.9
   24 -  .1     74 +  .6        24 +  .2     74 +  .1        24 - 4.7
   25 -  .1     75 +  .2        25 +  .1     75 +  .1        25 - 1.1
   26 -  .1     76 +  .2        26 +  .1     76 +  .1        26 - 3.2
   27 -  .1     77 + 1.2        27 +  .1     77 +  .1        27 +  .9
   28 -  .1     78 + 1.7        28 +  .1     78 +  .1        28 + 2.9
   29 -  .1     79 + 1.8        29 +  .1     79 +  .3        29 + 5.2
   30 -  .1     80 + 1.9        30 +  .5     80 +  .5        30 +  .1
   31 -  .1     81 + 1.9        31 -  .1     81 +  .6
   32 -  .1     82 + 1.9        32 -  .1     82 + 1.0     Seq. 5
   33 -  .1     83 + 1.0        33 -  .1     83 +  .9
   34 -  .1     84 +  .2        34 -  .1     84 +  .9
   35 -  .1     85 +  .2        35 -  .1     85 + 1.1
   36 -  .1     86 +  .4        36 -  .1     86 + 1.2
   37 -  .1     87 + 1.2        37 -  .1     87 + 1.8
   38 -  .1     88 + 1.3        38 -  .1     88 +  .4
   39 -  .1     89 +  .1        39 -  .1     89 + 1.1
   40 -  .1     90 +  .2        40 -  .1     90 +  .2
   41 -  .1     91 +  .2        41 -  .1     91 +  .5
   42 -  .1     92 +  .1        42 -  .1     92 + 1.5
   43 -  .1     93 +  .8        43 -  .1     93 +  .7
   44 -  .1     94 +  .4        44 -  .1     94 +  .2
   45 -  .1     95 +  .4        45 -  .1     95 +  .1
   46 -  .1     96 +  .4        46 -  .1     96 +  .1
   47 -  .1     97 +  .5        47 -  .1     97 +  .1
   48 -  .1     98 +  .2        48 -  .1     98 +  .2
   49 -  .1     99 +  .2        49 -  .1     99 +  .5
   50 -  .1    100 +  .1        50 -  .1    100 +  .1
```

```
        1764   .05    0°    .35    0    10.0   -2.5°  1.048   2026.9   .002157

a) 1 +  0        51 +  .1      b) 1 +   .1      51 +   .1      c) 1 +   .1
   2 +  0        52 +  .6         2 +   .1      52 +   .6         2 -  2.0
   3 +  0        53 +  .5         3 +   .1      53 +   .1         3 -  4.9
   4 +  0        54 + 2.8         4 +   .1      54 + 1.7         4 -  5.3
   5 +  0        55 +  .1         5 +   .1      55 + 3.3         5 -  4.2
   6 -  .1       56 + 1.8         6 +   .1      56 + 2.7         6 +   .6
   7 -  .1       57 + 5.2         7 +   .1      57 + 5.7         7 -  1.7
   8 -  .1       58 + 1.9         8 +   .1      58 + 8.9         8 +   .1
   9 -  .1       59 -  .6         9 +   .1      59 + 9.3         9 +14.0
  10 + 3.0       60 + 1.7        10 +   .1      60 + 8.6        10 +29.4
  11 -  .1       61 + 5.7        11 + 2.7       61 + 4.5        11 -12.9
  12 -  .1       62 + 2.9        12 +   .1      62 + 4.5        12 -16.7
  13 -  .1       63 +  .2        13 +   .4      63 + 4.5        13 -18.3
  14 -  .1       64 + 2.3        14 + 3.0       64 + 4.3        14 -13.7
  15 -  .1       65 + 5.8        15 +   .1      65 + 5.6        15 + 1.7
  16 -  .1       66 + 3.1        16 +   .1      66 + 8.3        16 - 7.0
  17 -  .1       67 +  .1        17 +   .1      67 + 9.4        17 +11.3
  18 -  .1       68 + 2.3        18 +   .1      68 + 9.4        18 +31.8
  19 -  .1       69 + 5.8        19 +   .1      69 + 6.6        19 +43.2
  20 -  .1       70 + 2.7        20 +   .1      70 + 2.2        20 +   .1
  21 -  .1       71 +  .1        21 + 0         71 + 2.0        21 -14.8
  22 -  .1       72 + 1.5        22 +   .1      72 + 1.2        22 -21.9
  23 -  .1       73 + 5.1        23 + 1.0       73 + 1.8        23 -19.5
  24 -  .1       74 + 5.4        24 + 7.8       74 -   .2        24 -11.6
  25 -  .1       75 + 2.2        25 + 0         75 -   .9        25 + 4.5
  26 -  .1       76 + 3.3        26 +   1       76 -   .9        26 - 4.9
  27 -  .1       77 + 5.8        27 +   .1      77 +   .4        27 +12.5
  28 -  .1       78 + 7.2        28 +   .1      78 +   .4        28 +22.5
  29 -  .1       79 + 6.3        29 +   .7      79 +   .7        29 +32.4
  30 -  .1       80 + 6.3        30 + 4.0       80 + 1.3        30 +   .2
  31 -  .1       81 + 6.6        31 + 0         81 + 2.2
  32 -  .1       82 + 7.4        32 +   .1      82 + 3.5        Seq. 5
  33 -  .1       83 + 6.0        33 +   .2      83 + 3.7
  34 -  .1       84 +  .5        34 +   .3      84 + 3.8
  35 -  .1       85 + 1.4        35 +   .4      85 + 5.1
  36 -  .1       86 + 3.7        36 +   .5      86 + 5.8
  37 -  .1       87 + 6.3        37 +   .5      87 +10.5
  38 -  .1       88 + 4.8        38 +   .5      88 + 2.2
  39 -  .1       89 +  .1        39 +   .5      89 + 7.3
  40 -  .1       90 -  .7        40 + 0         90 + 2.5
  41 -  .1       91 + 2.0        41 + 0         91 + 5.2
  42 -  .1       92 +  .1        42 + 0         92 +11.6
  43 -  .1       93 + 5.8        43 + 0         93 + 5.9
  44 -  .1       94 + 4.9        44 + 0         94 + 1.3
  45 -  .1       95 + 4.9        45 + 0         95 + 2.2
  46 -  .1       96 + 5.7        46 + 0         96 + 4.5
  47 -  .1       97 + 3.8        47 + 0         97 + 3.5
  48 -  .1       98 +  .1        48 + 0         98 + 4.4
  49 -  .1       99 +  .1        49 + 0         99 + 5.7
  50 -  .1      100 +  .1        50 + 0        100 +  .1
```

1765 .05   0°   .35   0   10.0   0°   1.049   2026.9   .002157

a)				b)				c)	
1	- .1	51	+ .1	1	- .1	51	+ .1	1	+ .2
2	- .1	52	+ .7	2	- .1	52	+ .5	2	- 8.3
3	- .1	53	+ .2	3	- .1	53	+ .2	3	-14.8
4	- .1	54	+ 4.6	4	- .1	54	+ 5.5	4	-14.7
5	- .1	55	+ 3.5	5	- .1	55	+ 6.0	5	- 9.7
6	- .1	56	+ 3.7	6	- .1	56	+ 3.2	6	+ 2.2
7	- .1	57	+ 4.2	7	- .1	57	+ 4.6	7	- 4.5
8	- .1	58	+ 4.1	8	- .1	58	+ 4.6	8	+ 7.8
9	- .1	59	+ 1.8	9	- .1	59	+ 2.8	9	+23.7
10	+ .8	60	+ 3.0	10	+ 0	60	+ 1.8	10	+33.9
11	+ 0	61	+ 4.5	11	+ 6.2	61	+ 1.4	11	- 7.2
12	- .1	62	+ 4.6	12	- .1	62	+ 2.0	12	-12.1
13	- .1	63	+ 3.8	13	+ 0	63	+ 2.9	13	-14.2
14	- .1	64	+ 4.0	14	+ 6.2	64	+ 5.0	14	- 1.1
15	- .1	65	+ 4.6	15	- .1	65	+ 6.1	15	+ 1.7
16	- .1	66	+ 4.2	16	- .1	66	+ 7.0	16	- 6.3
17	- .1	67	+ 2.6	17	- .1	67	+ 6.8	17	+ 3.2
18	- .1	68	+ 3.5	18	- .1	68	+ 5.6	18	+23.7
19	- .1	69	+ 4.9	19	- .1	69	+ 3.1	19	+38.4
20	- .1	70	+ 2.4	20	- .1	70	+ .7	20	+ .2
21	- .1	71	+ 1.4	21	- .1	71	+ .9	21	- 9.3
22	- .1	72	+ 2.3	22	- .1	72	+ 1.0	22	-15.4
23	- .1	73	+ 4.2	23	- .1	73	+ 1.3	23	-15.1
24	- .1	74	+ 3.1	24	+ 5.2	74	+ 3.8	24	- 9.0
25	- .1	75	+ 1.4	25	- .1	75	+ 5.1	25	+ 1.9
26	- .1	76	+ 2.6	26	- .1	76	+ 5.9	26	- 6.9
27	- .1	77	+ 5.0	27	- .1	77	+ 6.0	27	+ 2.9
28	- .1	78	+ 4.0	28	- .1	78	+ 5.2	28	+15.0
29	- .1	79	+ 2.7	29	- .1	79	+ 3.7	29	+28.1
30	- .1	80	+ 3.8	30	+ .3	80	+ 2.0	30	+ .1
31	- .1	81	+ 5.1	31	+ 0	81	+ 2.3		
32	- .1	82	+ 5.9	32	+ 0	82	+ 2.1	Seq. 5	
33	- .1	83	+ 6.4	33	- .1	83	+ 2.3		
34	- .1	84	+ .9	34	- .1	84	+ 2.7		
35	- .1	85	+ 2.1	35	- .1	85	+ 3.3		
36	- .1	86	+ 3.5	36	- .1	86	+ 3.7		
37	- .1	87	+ 4.5	37	- .1	87	+ 5.9		
38	- .1	88	+ 6.0	38	+ .4	88	+ 1.5		
39	- .1	89	+ 6.3	39	+ .5	89	+ 1.6		
40	- .1	90	+ 1.9	40	- .1	90	+ 2.2		
41	- .1	91	+ 2.0	41	- .1	91	+ 3.0		
42	- .1	92	+ .1	42	- .1	92	+ 5.5		
43	- .1	93	+ 3.9	43	- .1	93	+ 1.2		
44	- .1	94	+ 3.0	44	- .1	94	+ 1.0		
45	- .1	95	+ 3.4	45	- .1	95	+ 1.6		
46	- .1	96	+ 3.9	46	- .1	96	+ 2.9		
47	- .1	97	+ 2.6	47	- .1	97	+ 2.9		
48	- .1	98	+ .1	48	- .1	98	+ 3.2		
49	- .1	99	+ .1	49	- .1	99	+ 3.6		
50	- .1	100	+ .1	50	- .1	100	+ .1		

1766 .05 0° .35 0 10.0 +2.5° 1.048 2026.9 .002157

a)				b)				c)	
1	− .1	51	+ .2	1	+ .1	51	+ .1	1	+ .2
2	− .1	52	+ .6	2	+ .1	52	+ .2	2	−11.5
3	− .1	53	+ .2	3	+ 0	53	+ .1	3	−20.1
4	− .1	54	+ 7.8	4	+ 0	54	+ .1	4	−19.0
5	− .1	55	+ 6.1	5	+ 0	55	+ .3	5	−11.7
6	− .1	56	+ 5.0	6	+ 0	56	+ .2	6	+ 3.2
7	− .1	57	+ 5.3	7	+ 0	57	− 2.1	7	− 3.1
8	− .1	58	+ 5.5	8	+ 0	58	− 1.8	8	+14.4
9	− .1	59	+ 2.4	9	+ 0	59	− 1.5	9	+29.8
10	+ .3	60	+ 3.3	10	+ 3.1	60	+ .2	10	+36.3
11	+ 0	61	+ 5.8	11	+ 3.2	61	+ 1.9	11	− 9.4
12	+ 0	62	+ 4.8	12	+ .1	62	+ 2.2	12	−11.9
13	+ 0	63	+ .9	13	+ .1	63	+ 2.8	13	−12.8
14	+ 0	64	+ 2.0	14	+ 6.0	64	+ 3.0	14	−11.9
15	− .1	65	+ 4.9	15	+ 0	65	− 3.7	15	+ 2.2
16	+ 0	66	+ 2.5	16	+ 0	66	+ 5.5	16	− 7.3
17	− .1	67	− .1	17	+ 0	67	+ 6.8	17	+ 4.0
18	− .1	68	+ 1.7	18	+ 0	68	+ 7.1	18	+23.0
19	− .1	69	+ 5.0	19	+ 0	69	+ 5.4	19	+35.3
20	− .1	70	+ 1.3	20	+ 0	70	+ 2.7	20	+ .2
21	− .1	71	− 1.6	21	+ 0	71	+ 1.6	21	− 1.3
22	− .1	72	+ .8	22	+ 0	72	+ 1.1	22	− 3.3
23	− .1	73	+ 4.3	23	+ 0	73	+ 1.2	23	− 4.8
24	− .1	74	+ 2.8	24	+ .9	74	+ .1	24	− 4.8
25	− ..1	75	− .6	25	+ .1	75	+ .7	25	+ .2
26	− .1	76	+ 1.5	26	+ 0	76	+ 2.7	26	− 2.2
27	− .1	77	+ 5.4	27	+ 0	77	+ 6.9	27	− 2.2
28	− .1	78	+ 4.0	28	+ 0	78	+ 8.7	28	+ 4.9
29	− .1	79	− .3	29	+ 0	79	+ 9.3	29	+19.8
30	− .1	80	+ 2.2	30	+ 0	80	+ 7.7	30	+ .1
31	− .1	81	+ 5.6	31	+ 0	81	+ 3.4		
32	− .1	82	+ 7.1	32	+ 0	82	+ 3.5	Seq. 5	
33	− .1	83	+10.1	33	+ 0	83	+ 3.0		
34	− .1	84	+ 2.0	34	+ 0	84	+ 3.8		
35	− .1	85	+ 2.2	35	+ 0	85	+ 4.8		
36	− .1	86	+ 2.4	36	+ 0	86	+ 5.3		
37	− .1	87	+ 4.7	37	+ 0	87	+ .1		
38	− .1	88	+ 2.3	38	+ 0	88	+ .8		
39	− .1	89	+ 9.7	39	+ 0	89	− 1.2		
40	− .1	90	+ 8.8	40	+ 0	90	+ 3.0		
41	− .1	91	+ 2.0	41	+ 0	91	+ 4.5		
42	− .1	92	+ .2	42	+ 0	92	+ 5.3		
43	− .1	93	+ 4.7	43	+ 0	93	+ .9		
44	− .1	94	+ 3.6	44	+ 0	94	+ .2		
45	− .1	95	+ 3.9	45	+ 0	95	+ 1.4		
46	− .1	96	+ 5.1	46	+ 0	96	+ 3.7		
47	− .1	97	+ 4.5	47	+ 0	97	+ 2.8		
48	− .1	98	+ .1	48	+ 0	98	+ 3.1		
49	− .1	99	+ .1	49	+ 0	99	+ 4.3		
50	− .1	100	+ .1	50	+ 0	100	+ .1		

1776 .05 0° .30 0 10.0 +2.5° 1.009 2026.2 .002203

a)				b)				c)	
1 +	.1	51 +	.1	1 +	.1	51 +	.2	1 +	.2
2 +	.1	52 +	.3	2 +	.1	52 +	.3	2 -	2.0
3 +	.1	53 +	.2	3 +	.1	53 +	.1	3 -	6.1
4 +	.1	54 +	1.8	4 +	.1	54 +	.7	4 -	5.1
5 +	.2	55 +	1.3	5 +	.1	55 +	.9	5 -	3.9
6 +	.2	56 +	.7	6 +	.1	56 +	.3	6 +	.2
7 +	.2	57 +	.2	7 +	.1	57 +	.1	7 +	.2
8 +	.2	58 +	.2	8 +	.1	58 +	.1	8 +	1.4
9 +	.1	59 +	.2	9 +	.1	59 +	.1	9 +	5.2
10 -	1.4	60 +	.2	10 +	.5	60 +	.1	10 +	6.7
11 +	0	61 +	.3	11 +	.6	61 +	.1	11 -	.1
12 +	0	62 +	.5	12 +	.1	62 +	.5	12 -	2.5
13 -	.1	63 +	.7	13 +	0	63 +	.9	13 -	3.0
14 -	.1	64 +	.7	14 +	1.3	64 +	1.0	14 -	2.5
15 +	0	65 +	.7	15 +	.1	65 +	1.0	15 +	.5
16 +	0	66 +	.5	16 +	.1	66 +	.9	16 +	.1
17 +	0	67 +	.2	17 +	.2	67 +	1.7	17 +	.7
18 +	0	68 +	.2	18 +	.2	68 +	1.9	18 +	3.4
19 +	0	69 +	.3	19 +	.2	69 +	1.6	19 +	5.9
20 +	0	70 +	.1	20 +	.2	70 +	.1	20 +	.3
21 +	0	71 +	.1	21 +	.2	71 +	.1	21 -	3.6
22 +	0	72 +	.1	22 +	.3	72 +	.1	22 -	3.4
23 +	0	73 +	.1	23 +	.3	73 +	.1	23 -	3.3
24 +	0	74 +	.1	24 +	.3	74 +	.1	24 -	2.9
25 +	0	75 +	.1	25 +	.3	75 +	.1	25 -	2.5
26 +	0	76 +	.1	26 +	.3	76 +	.1	26 -	2.1
27 +	0	77 +	.3	27 +	.3	77 +	1.6	27 -	1.8
28 +	0	78 +	.3	28 +	.3	78 +	2.2	28 -	1.2
29 +	0	79 +	.3	29 +	.3	79 +	2.4	29 +	3.6
30 +	0	80 +	.3	30 +	.3	80 +	2.0	30 +	.1
31 +	0	81 +	.6	31 +	.3	81 +	.5		
32 +	0	82 +	.9	32 +	.3	82 +	.6	Seq. 5	
33 +	0	83 +	1.3	33 +	.3	83 +	.2		
34 +	0	84 +	.1	34 +	.1	84 +	.5		
35 +	0	85 +	.1	35 +	.1	85 +	.9		
36 +	0	86 +	.1	36 +	.1	86 +	1.0		
37 +	0	87 +	.3	37 +	.1	87 +	.8		
38 +	0	88 +	.2	38 +	0	88 +	.8		
39 +	0	89 +	8	39 +	0	89 +	.1		
40 +	0	90 +	.4	40 +	0	90 +	.2		
41 +	0	91 +	.1	41 +	0	91 +	.6		
42 +	0	92 +	.1	42 +	0	92 +	.8		
43 +	0	93 +	.1	43 +	0	93 +	.1		
44 +	0	94 +	.1	44 +	0	94 +	.1		
45 +	0	95 +	.1	45 +	0	95 +	.1		
46 +	0	96 +	.1	46 +	0	96 +	.1		
47 +	0	97 +	.1	47 +	0	97 +	.2		
48 +	0	98 +	.1	48 +	0	98 +	.2		
49 +	0	99 +	.1	49 +	0	99 +	.5		
50 +	0	100 +	..1	50 +	0	100 +	.1		

1777   .05   0°   .30   0   10.0   0°   1.010   2026.2   .002203

a)

#			#		
1	+	0	51	·	.2
2	+	0	52	·	.2
3	+	0	53	+	.1
4	+	0	54	·	.9
5	+	0	55	+	1.0
6	+	0	56	·	1.0
7	+	0	57	·	.1
8	+	0	58	·	.2
9	+	0	59	+	.1
10	+	0	60	·	.2
11	+	0	61	·	.3
12	+	0	62	·	.7
13	+	0	63	·	1.0
14	-	0	64	·	.9
15	+	0	65	·	.9
16	+	0	66	·	.9
17	+	0	67	·	.5
18	+	0	68	·	.7
19	+	0	69	·	.5
20	+	0	70	·	.2
21	+	0	71	·	.2
22	+	0	72	·	.2
23	+	0	73	+	.1
24	+	0	74	·	.2
25	+	0	75	·	.2
26	+	0	76	·	.2
27	+	0	77	·	.5
28	+	0	78	·	.6
29	+	0	79	·	.7
30	+	0	80	·	.5
31	+	0	81	·	.5
32	+	0	82	·	1.1
33	+	0	83	·	1.2
34	+	0	84	·	.1
35	+	0	85	·	.2
36	·	0	86	·	.3
37	+	0	87	·	.5
38	·	0	88	·	.9
39	+	0	89	·	1.0
40	+	0	90	·	.1
41	+	0	91	·	.1
42	+	0	92	·	.1
43	+	0	93	+	.2
44	+	0	94	·	.1
45	+	0	95	·	.1
46	+	0	96	·	.1
47	+	0	97	·	.2
48	+	0	98	·	.1
49	+	0	99	·	.1
50	+	0	100	·	.1

b)

#			#		
1	·	0	51	+	.1
2	·	0	52	·	.8
3	+	0	53	+	.2
4	-	.1	54	·	1.5
5	-	.1	55	·	2.3
6	-	.1	56	·	1.0
7	-	.1	57	·	1.1
8	-	.1	58	+	1.3
9	-	.1	59	·	1.4
10	-	.1	60	·	.8
11	-	.7	61	+	.8
12	-	.1	62	·	1.0
13	-	.1	63	·	1.4
14	·	1.0	64	·	1.6
15	-	.1	65	·	1.7
16	-	.1	66	·	1.9
17	-	.1	67	·	2.0
18	-	.1	68	·	2.9
19	-	.1	69	·	1.8
20	-	.1	70	-	.1
21	-	.1	71	·	.2
22	-	.1	72	·	.2
23	-	.1	73	·	.2
24	·	.5	74	·	.4
25	-	.1	75	·	.5
26	-	.1	76	+	.8
27	-	.1	77	·	1.5
28	-	.1	78	+	1.0
29	-	.1	79	·	1.7
30	-	.1	80	·	1.
31	-	.1	81	·	1.5
32	-	.1	82	·	1.5
33	-	.1	83	·	1.5
34	-	.1	84	·	1.5
35	-	.1	85	+	1.5
36	-	.1	86	-	1.5
37	-	.1	87	·	1.7
38	-	.1	88	·	.7
39	-	.1	89	·	.4
40	-	.1	90	·	.5
41	-	.1	91	·	.5
42	-	.1	92	·	1.0
43	-	.1	93	·	.1
44	-	.1	94	·	.2
45	-	.1	95	·	.2
46	-	.1	96	·	.2
47	-	.1	97	·	.3
48	-	.1	98	·	.5
49	-	.1	99	·	.
50	-	.1	100	+	.1

c)

#		
1	·	.1
2	-	3.7
3	-	3.8
4	-	3.7
5	-	3.2
6	·	.2
7	·	.3
8	·	2.3
9	·	8.0
10	·	9.7
11	+	.1
12	-	1.5
13	-	1.6
14	-	1.6
15	·	.4
16	·	.2
17	·	.4
18	·	4.9
19	·	9.0
20	·	.1
21	-	3.5
22	-	0.9
23	-	6.5
24	-	4.4
25	·	.1
26	-	2.5
27	+	.5
28	·	3.1
29	·	5.4
30	·	.1

Seq. 5

1778　.05　0°　.30　0　10.0　-2.5°　1.010　2026.2　.002203

```
a)  1 +  .1      51 +  .2      b) 1 +  0       51 +  .1      c) 1 +  .1
    2 +  .1      52 +  .2         2 -  .1      52 + 1.9         2 +  .2
    3 +  .1      53 +  .2         3 -  .1      53 +  .1         3 +  .1
    4 +  .1      54 +  .4         4 -  .1      54 +  .6         4 +  .1
    5 +  .1      55 +  .4         5 -  .1      55 + 1.1         5 +  .1
    6 +  .1      56 +  .3         6 -  .1      56 .  .2         6 +  .1
    7 +  0       57 +  .3         7 -  .1      57 .  .4         7 .  .2
    8 +  0       58 +  .3         8 -  .1      58 + 1.3         8 .  .3
    9 +  0       59 .  .1         9 -  .1      59 + 1.5         9 + 5.0
   10 +  0       60 .  .1        10 -  .1      60 . 1.5        10 . 7.6
   11 +  0       61 .  .2        11 -  .1      61 -  .1        11 +  .1
   12 +  0       62 .  .2        12 -  .1      62 +  .5        12 - 4.1
   13 +  0       63 .  .3        13 -  .1      63 -  .6        13 - 4.1
   14 +  0       64 .  .3        14 -  .1      64 .  .9        14 - 3.3
   15 +  0       65 .  .3        15 -  .1      65 .  .9        15 -  .4
   16 +  0            .1        16 -  .1      66 . 1.3        16 +  .1
   17 .  0       67 .  .1        17 -  .1      67 . 1.7        17 . 1.8
   18 +  0       68 .  .1        18 -  .1      68 . 1.9        18 .  .1
   19 +  0.      69 .  .2        19 -  .1      69 . 1.4        19 . 9.5
   20 +  0       70 .  .1        20 -  .1      70 .  .2        20 .  .1
   21 .  0       71 .  .1        21 -  .1      71 .  .2        21 - 4.5
   22 +  0       72 .  .1        22 -  .1      72 .  .2        22 - 7.8
   23 +  0       73 .  .1        23 -  .1      73 .  .2        23 - 6.9
   24 +  0       74 -  .1        24 +  .4      74 .  .2        24 - 4.9
   25 .  0       75 +  .1        25 +  0       75 -  .1        25 -  .5
   26 +  0       76 +  .1        26 -  .1      76 .  .2        26 - 4.1
   27 .  0       77 +  .2        27 -  .1      77 +  .1        27 + 1.0
   28 +  0       78 .  .4        28 -  .1      78 +  .1        28 - 3.1
   29 .  0       79 .  .6        29 -  .1      79 .  .3        29 + 5.9
   30 +  0       80 +  .7        30 +  0       80 -  .5        30 +  .1
   31 +  0       81 .  .7        31 -  .1      81 +  .4
   32 +  0       82 .  .8        32 -  .1      82 +  .6      Seq. 5
   33 +  0       83 +  .9        33 -  .1      83 +  .6
   34 +  0       84 .  .1        34 -  .1      84 +  .5
   35 +  0       85 .  .1        35 -  .1      85 +  .7
   36 +  0       86 .  .1        36 -  .1      86 +  .8
   37 +  0       87 .  .2        37 -  .1      87 - 1.5
   38 +  0       88 .  .4        38 -  .1      88 +  .6
   39 +  0       89 -  .1        39 -  .1      89 +  .8
   40 +  0       90 .  .1        40 -  .1      90 +  .4
   41 .  0       91 .  .1        41 -  .1      91 +  .5
   42 +  0       92 +  .1        42 -  .1      92 + 1.3
   43 +  0       93 +  .1        43 -  .1      93 +  .2
   44 .  0       94 +  .2        44 -  .1      94 +  .1
   45 +  0       95 .  .2        45 -  .1      95 +  .1
   46 +  0       96 +  .2        46 -  .1      96 +  .2
   47 +  0       97 .  .2        47 -  .1      97 +  .2
   48 +  0       98 +  .2        48 -  .1      98 +  .3
   49 +  0       99 +  .2        49 -  .1      99 +  .5
   50 +  0      100 .  .2        50 -  .1     100 +  .1
```

1788 .05   0°   .30   0   10.0   +2.5°   1.049   2024.8   .002143

a)				b)				c)	
1	+ 0	51	· .1	1	- .1	51	· .2	1	· .2
2	+ 0	52	· .5	2	- .1	52	+ 1.2	2	-12.9
3	+ 0	53	· .1	3	- .1	53	· .9	3	-20.0
4	· 0	54	· 7.0	4	- .1	54	· 1.7	4	-18.0
5	+ 0	55	· 5.2	5	· 0	55	· 1.8	5	- 9.4
6	· 0	56	· 5.4	6	· .1	56	· 1.0	6	· 4.1
7	+ 0	57	· 5.5	7	· .1	57	· .5	7	- 1.1
8	+ 0	58	· 5.5	8	+ .3	58	· .	8	·17.1
9	+ 0	59	· 2.0	9	· .4	59	· .5	9	31.1
10	- .5	60	· 3.3	10	· 2.9	60	· .5	10	·37.5
11	· .1	61	· 5.5	11	· 5.2	61	· 1.4	11	- 7.4
12	· .1	62	· 5.2	12	- .1	62	· 2.5	12	-12.0
13	· .1	63	· 1.3	13	· .5	63	· 4.0	13	-12.8
14	+ .1	64	· 2.8	14	· 7.7	64	· 4.1	14	- 9.3
15	+ 0	65	· 5.4	15	· .1	65	· 5.3	15	· 3.6
16	· 0	66	· 2.5	16	- .1	66	· 7.	16	- 6.5
17	+ 0	67	· .1	17	- .1	67	· 8.5	17	· 4.8
18	· 0	68	3.4	18	- .1	68	· 9.1	18	·24.5
19	+ 0	69	· 5.5	19	- .1	69	· 7.1	19	·37.5
20	+ .1	70	· 1.5	20	- .1	70	+ 2.6	20	· .2
21	+ .1	71	· .1	21	+ 0	71	+ 2.6	21	- 1.7
22	+ .1	72	· 1.5	22	+ 0	72	· 2.1	22	- 4.2
23	+ .1	73	· 4.6	23	· 0	73	· 2.1	23	- 5.0
24	+ .1	74	· 2.5	24	· 3.5	74	1.2	24	- 4.4
25	+ .1	75	- .8	25	· .1	75	1.9	25	· .8
26	+ .1	76	· 2 0	26	- .1	76	· 4.5	26	- 1.5
27	· .1	77	· 5.4	27	- .1	77	·10.5	27	- 1.5
28	+ .1	78	· 2.2	28	- .1	78	·11.3	28	· 6.9
29	+ .1	79	· .1	29	- .1	79	·11.2	29	·23.1
30	+ .1	80	· 2.7	30	- .1	80	· 0.6	30	· .1
31	+ .1	81	· 6.2	31	- .1	81	· 3.4		
32	+ .1	82	· 7.2	32	- .1	82	· 3.5		
33	+ .1	83	·11.8	33	- .1	83	+ 3 5	Seq. 5	
34	+ .1	84	· 1.3	34	- .1	84	- 4.5		
35	- .1	85	· 1.4	35	- .1	85	- 6.0		
36	+ 1	86	- 2.5	36	- .1	86	+ 6.5		
37	+ .1	87	· 5.2	37	1	87	- 1.2		
38	+ .1	88	2.0	38	- .1	88	- 2.2		
39	+ 1	89	·12.1	39	- .1	89	· .2		
40	+ .1	90	· 5.5	40	- .1	90	· 4.3		
41	+ .1	91	· 1.1	41	1	91	· 5.7		
42	+ .1	92	· .2	42	- .1	92	· 6.9		
43	· .1	93	· 4.8	43	1	93	· .9		
44	+ .1	94	· 2.5	44	- .1	94	+ 1.0		
45	+ .1	95	3.7	45	- .1	95	+ 2.9		
46	+ .1	96	· 4.8	46	- .1	96	5.0		
47	+ .1	97	· 3.5	47	· .1	97	+ 4.5		
48	+ .1	98	· .1	48	- .1	98	· 4.8		
49	+ .1	99	- .1	49	- .1	99	+ 5.9		
50	+ .1	100	+ .1	50	- .1	100	+ .1		

1789 .05   0°   .30   0   10.0   0°   1.049   2024.8   .002143

a)		b)		c)
1 - .1	51 + .2	1 + 0	51 + .1	1 + .2
2 - .1	52 + .5	2 + 0	52 + .6	2 - 8.7
3 - .1	53 + .2	3 + .4	53 + .1	3 -15.0
4 - .1	54 + 4.3	4 + .1	54 + 6.0	4 -13.9
5 - .1	55 + 2.8	5 + .1	55 + 7.1	5 - 8.3
6 - .1	56 + 3.3	6 + .1	56 + 4.3	6 + 2.9
7 - .1	57 + 3.7	7 + 0	57 + 5.7	7 - 4.1
8 - .1	58 + 3.8	8 + 0	58 + 5.9	8 + 7.7
9 - .1	59 + 2.5	9 + .4	59 + 4.5	9 +25.5
10 + 3.2	60 + 2.9	10 + .6	60 + 3.4	10 +35.9
11 - .1	61 + 3.8	11 + 7.0	61 + 2.8	11 - 5.5
12 - .1	62 + 4.0	12 + 0	62 + 3.0	12 -11.4
13 - .1	63 + 3.4	13 + .4	63 + 3.6	13 -12.6
14 - .1	64 + 3.6	14 + 7.2	64 + 5.0	14 - 9.3
15 - .1	65 + 4.2	15 + .1	65 + 6.6	15 + 3.0
16 - .1	66 + 4.0	16 + 0	66 + 7.8	16 - 5.7
17 - .1	67 + 2.5	17 + 0	67 + 7.7	17 + 5.2
18 - .1	68 + 3.5	18 + .1	68 + 6.6	18 +25.9
19 - .1	69 + 4.4	19 + .2	69 + 4.2	19 +40.0
20 - .1	70 - 2.4	20 + 0	70 + 1.3	20 + .2
21 - .1	71 + 2.1	21 + 0	71 + 1.7	21 - 8.6
22 - .1	72 + 2.2	22 + 0	72 + 1.8	22 -14.2
23 - .1	73 + 3.6	23 + .6	73 + 2.3	23 -13.9
24 - .1	74 + 3.0	24 + 6.9	74 + 4.1	24 - 7.6
25 - .1	75 + 1.4	25 + 0	75 + 5.9	25 + 3.3
26 - .1	76 + 2.1	26 + 0	76 + 7.0	26 - 5.9
27 - .1	77 + 4.1	27 + .8	77 + 7.2	27 + 4.3
28 - .1	78 + 3.6	28 + 1	78 + 5.0	28 +15.9
29 - .1	79 + 3.1	29 + .1	79 + 4.6	29 +29.4
30 - .1	80 + 3.6	30 + 0	80 + 3.0	30 + .2
31 - .1	81 + 4.6	31 + 0	81 + 3.1	
32 - .1	82 + 5.1	32 + 0	82 + 3.0	
33 - .1	83 + 6.0	33 + 0	83 + 3.2	Seq. 5
34 - .1	84 + .3	34 + 0	84 + 3.7	
35 - .1	85 + 2.0	35 + 0	85 + 4.2	
36 - .1	86 + 2.9	36 + 0	86 + 4.4	
37 - .1	87 + 4.0	37 + 1	87 + 6.6	
38 - .1	88 + 5.6	38 + .4	88 + 2.4	
39 - .1	89 + 6.0	39 + 1.1	89 + 2.4	
40 - .1	90 + 1.4	40 + 0	90 + 3.0	
41 - .1	91 + 1.5	41 + 0	91 + 3.7	
42 - .1	92 + .1	42 + 0	92 + 6.3	
43 - .1	93 - 3.5	43 + 0	93 + 2.1	
44 - .1	94 + 2.8	44 + 0	94 + 2.0	
45 - .1	95 + 2.9	45 + 0	95 + 2.4	
46 - .1	96 + 3.2	46 + 0	96 + 3.1	
47 - .1	97 + 1.9	47 + 0	97 + 3.3	
48 - .1	98 + .1	48 + 0	98 + 3.7	
49 - .1	99 + .1	49 + 0	99 + 4.1	
50 - .1	100 + .1	50 + 0	100 + .1	

1790   .05   0°   .30   0   10.0   -2.5°   1.049   2024.8   .002143

a)				b)				c)	
1	− .1	51	+ .1	1	+ .1	51	+ .1	1	+ .2
2	− .1	52	+ .3	2	+ .1	52	+ .3	2	− .7
3	− .1	53	+ .2	3	+ .1	53	+ .1	3	− 4.5
4	− .1	54	+ 2.5	4	+ 0	54	+ 1.8	4	− 5.0
5	− .1	55	+ .2	5	+ 0	55	+ 3.4	5	− 3.6
6	− .1	56	+ 2.4	6	+ 0	56	+ 2.8	6	+ 1.5
7	− .1	57	+ 4.8	7	+ 0	57	+ 6.1	7	− 2.0
8	− .1	58	+ 1.8	8	+ 0	58	+10.0	8	+ .5
9	− .1	59	− .1	9	+ 0	59	+10.1	9	+15.2
10	+ 1.6	60	+ 1.5	10	+ 0	60	+ 7.5	10	+29.0
11	− .1	61	+ 5.8	11	+ 2.4	61	+ 2.9	11	−10.4
12	− .1	62	+ 3.6	12	+ 0	62	+ 3.4	12	−16.9
13	− .1	63	+ .6	13	+ .2	63	+ 3.5	13	−17.5
14	− .1	64	+ 2.8	14	+ 3.8	64	+ 3.6	14	−11.4
15	− .1	65	+ 6.0	15	+ 0	65	+ 6.2	15	+ 2.9
16	− .1	66	+ 2.8	16	+ 0	66	+ 8.9	16	− 4.9
17	− .1	67	+ .1	17	+ 0	67	+ 9.8	17	+12.0
18	− .1	68	+ 3.1	18	+ 0	68	+ 8.9	18	+31.4
19	− .1	69	+ 5.9	19	+ 1	69	+ 5.7	19	+40.9
20	− .1	70	+ 2.3	20	+ .1	70	+ 1.1	20	+ .2
21	− .1	71	+ .2	21	+ .1	71	+ 1.3	21	−13.5
22	− .1	72	+ 1.6	22	+ .1	72	+ .8	22	−20.4
23	− .1	73	+ 5.0	23	+ .4	73	+ 1.3	23	−19.1
24	− .1	74	+ 5.2	24	+ 7 2	74	+ .2	24	−11.2
25	− .1	75	+ 1.6	25	+ 0	75	+ .2	25	+ 4.2
26	− 1	76	+ 2.7	26	+ .1	76	+ .2	26	− 3.2
27	− .1	77	− 5.9	27	+ .1	77	+ .2	27	+12.5
28	− .1	78	+ 6.4	28	+ .2	78	+ .2	28	+ 1.6
29	− .1	79	+ 4.8	29	+ .2	79	+ .5	29	+32.4
30	− .1	80	+ 5.2	30	+ 2.9	80	+ 8	30	+ .1
31	− .1	81	+ 6.5	31	+ 0	81	+ 1.6		
32	− .1	82	+ 7.4	32	+ 0	82	+ 2.0		
33	− .1	83	+ 6.4	33	+ 0	83	+ 3.0	Seq. 5	
34	− .1	84	+ .1	34	+ .1	84	+ 3.3		
35	− .1	85	+ 1.2	35	+ .2	85	+ 4.6		
36	− .1	86	+ 3.2	36	+ .5	86	+ 5.4		
37	− .1	87	+ 5.1	37	+ 1.0	87	+12.8		
38	− .1	88	+ 5.5	38	+ 1.0	88	+ 1.5		
39	− .1	89	+ .3	39	+ 1.0	89	+ 5.3		
40	− .1	90	− 1.2	40	+ 0	90	+ 2.6		
41	− .1	91	+ 1.0	41	+ 0	91	+ 4.5		
42	− .1	92	+ .1	42	+ 0	92	+12.1		
43	− .1	93	− 5.3	43	+ 0	93	+ 4.0		
44	− .1	94	+ 3.7	44	+ 0	94	+ .6		
45	− .1	95	+ 4.5	45	+ 0	95	+ 2.0		
46	− .1	96	+ 5.1	46	+ 0	96	+ 4.1		
47	− .1	97	+ 3.7	47	+ 0	97	+ 3.6		
48	− .1	98	+ .1	48	+ 0	98	+ 4.3		
49	− .1	99	+ .1	49	+ 0	99	+ 5.4		
50	− .1	100	+ .1	50	+ 0	100	+ .1		

1809 .05 0° .25 0 10.0 +2.5° 1.010 2019.8 .002184

a)
#			#		
1	−	.1	51	+	.1
2	+	0	52	+	.6
3	+	0	53	+	.1
4	+	0	54	+	2.0
5	+	0	55	+	1.7
6	+	0	56	+	.8
7	+	0	57	+	.6
8	+	0	58	+	.8
9	+	0	59	+	.2
10	+	0	60	+	.2
11	+	0	61	+	.5
12	−	.1	62	+	1.1
13	−	.1	63	+	1.2
14	−	.1	64	+	1.3
15	−	.1	65	+	1.3
16	−	.1	66	+	1.0
17	−	.1	67	+	.4
18	−	.1	68	+	.9
19	−	.1	69	+	1.0
20	−	.1	70	+	.1
21	−	.1	71	+	.1
22	−	.1	72	+	.1
23	−	.1	73	+	.3
24	−	.1	74	+	.2
25	−	.1	75	−	.7
26	−	.1	76	+	.2
27	−	.1	77	+	1.0
28	−	.1	78	+	.3
29	−	.1	79	+	.3
30	−	.1	80	+	.7
31	−	.1	81	+	1.1
32	−	.1	82	+	1.4
33	−	.1	83	+	2.0
34	−	.1	84	+	.1
35	−	.1	85	+	.1
36	−	.1	86	+	.2
37	−	.1	87	+	.7
38	−	.1	88	+	.5
39	−	.1	89	+	1.7
40	−	.1	90	+	.1
41	−	.1	91	+	.2
42	−	.1	92	+	.2
43	−	.1	93	+	.2
44	−	.1	94	+	1
45	−	.1	95	+	.1
46	−	.1	96	+	.1
47	−	.1	97	+	.1
48	−	.1	98	+	.1
49	−	.1	99	+	.1
50	−	.1	100	+	.1

b)
#			#		
1	+	0	51	+	.3
2	+	0	52	−	.9
3	+	0	53	+	.2
4	+	0	54	−	1.2
5	+	0	55	−	1.4
6	+	0	56	−	.6
7	+	.1	57	+	.1
8	+	.2	58	−	.3
9	+	.2	59	+	4
10	+	.2	60	−	.2
11	+	1.2	61	−	.2
12	+	.1	62	−	.9
13	+	0	63	+	1.2
14	+	1.2	64	+	1.3
15	+	0	65	+	1.3
16	+	0	66	−	1.8
17	+	0	67	−	1.9
18	+	0	68	+	2.0
19	+	0	69	−	.7
20	+	0	70	−	.1
21	+	0	71	+	.1
22	+	0	72	+	.2
23	+	0	73	−	.2
24	+	.4	74	+	.2
25	+	.1	75	−	.2
26	+	0	76	+	.4
27	+	.1	77	−	1.7
28	+	0	78	−	1.4
29	+	0	79	−	2.1
30	+	0	80	+	1.1
31	+	0	81	−	.8
32	+	0	82	+	.9
33	+	0	83	−	.7
34	+	0	84	+	.8
35	+	0	85	+	1.0
36	+	0	86	+	1.1
37	+	0	87	+	.7
38	+	0	88	+	.7
39	+	0	89	+	.1
40	+	0	90	+	.2
41	+	0	91	+	.6
42	+	0	92	+	.9
43	+	0	93	+	.2
44	+	0	94	+	.2
45	+	0	95	+	.2
46	+	0	96	+	.2
47	+	0	97	+	.4
48	+	0	98	+	.2
49	+	0	99	+	.6
50	+	0	100	+	.1

c)
#		
1	+	.2
2	−	.6
3	−	3.1
4	−	2.7
5	−	1.0
6	+	1.4
7	+	.8
8	+	3.7
9	+	8.0
10	+	9.8
11	+	.2
12	−	.1
13	−	.3
14	−	.3
15	+	1.7
16	+	.9
17	+	1.8
18	+	7.2
19	+	8.9
20	+	.1
21	+	.1
22	−	.1
23	−	.8
24	−	.7
25	+	.3
26	+	.2
27	+	.3
28	+	2.4
29	+	4.5
30	+	.1

Seq. 5

1810 .05 0° .25 0 10.0 0° 1.011 2019.8 .002184

a)				b)				c)	
1 + 0		51 + .1		1 + 0		51 + .2		1 + .2	
2 + 0		52 + .6		2 + 0		52 + .7		2 - 1.8	
3 + 0		53 + .1		3 + 0		53 + .1		3 - 2.5	
4 + 0		54 + 1.6		4 + 0		54 + 1.9		4 - 2.6	
5 + 0		55 + 1.8		5 + 0		55 + 2.4		5 - 1.5	
6 + 0		56 + 1.5		6 + 0		56 + 1.2		6 + .6	
7 + 0		57 + .3		7 + 0		57 + .4		7 + .2	
8 + 0		58 + .5		8 + 0		58 + 1.1		8 + 2.4	
9 + 0		59 + .5		9 + 0		59 + .7		9 + 6.4	
10 + .6		60 + .5		10 + 0		60 + .7		10 + 8.3	
11 + 0		61 + .7		11 + 1.4		61 + .7		11 + .2	
12 + 0		62 + 1.3		12 + 0		62 - 1.1		12 - 1.1	
13 + 0		63 + 1.5		13 + 0		63 + 1.4		13 - 1.8	
14 + 0		64 + 1.5		14 + 1.4		64 - 1.5		14 - 1.5	
15 + 0		65 + 1.4		15 + 0		65 + 1.5		15 + .5	
16 + 0		66 + 1.4		16 + 0		66 + 1.7		16 + .3	
17 + 0		67 + 1.4		17 + 0		67 - 1.8		17 + 1.6	
18 + 0		68 + 1.4		18 + 0		68 + 1.9		18 + 5.8	
19 + 0		69 + 1.2		19 + 0		69 + .8		19 - 8.7	
20 + 0		70 + .1		20 - 0		70 - .1		20 - .1	
21 + 0		71 + .1		21 + 0		71 + .1		21 - 1.8	
22 + 0		72 + .1		22 + 0		72 - .2		22 - 4.5	
23 + 0		73 + .3		23 + 0		73 - .2		23 - 3.9	
24 + 0		74 + .4		24 + 1.2		74 + .3		24 - 2.8	
25 + 0		75 + .1		25 + 0		75 + .5		25 - .2	
26 + 0		76 + .1		26 + 0		76 + .8		26 - 2.5	
27 + 0		77 - .5		27 + 0		77 - 1.2		27 + .7	
28 + 0		78 + .7		28 + 0		78 + .9		28 + 2.7	
29 + 0		79 + .9		29 + 0		79 + 1.1		29 + 5.7	
30 + 0		80 + 1.1		30 + 0		80 + 1.3		30 + .1	
31 + 0		81 - 1.1		31 + 0		81 - 1.0			
32 + 0		82 + 1.2		32 + 0		82 + 1.0		Seq. 5	
33 + 0		83 + 1.4		33 + 0		83 + 1.0			
34 + 0		84 + .4		34 + 0		84 + 1.0			
35 + 0		85 + .5		35 + 0		85 + .9			
36 + 0		86 + .6		36 + 0		86 + .9			
37 + 0		87 + .8		37 + 0		87 + 1.4			
38 + 0		88 + .9		38 + 0		88 + .8			
39 + 0		89 + 1.0		39 + 0		89 + .4			
40 + 0		90 + .1		40 + 0		90 + .4			
41 + 0		91 + .1		41 + 0		91 + .4			
42 + 0		92 + .1		42 + 0		92 + 1.0			
43 + 0		93 + .3		43 + 0		93 + .5			
44 + 0		94 + .4		44 + 0		94 + .2			
45 + 0		95 + .2		45 + 0		95 + .2			
46 + 0		96 + .2		46 + 0		96 + .2			
47 + 0		97 + .2		47 + 0		97 + .2			
48 + 0		98 + .2		48 + 0		98 + .3			
49 + 0		99 + .2		49 + 0		99 + .3			
50 + 0		100 + .2		50 + 0		100 + .2			

1811 .05   0°   .25   0   10.0   -2.5°   1.010   2019.8   .002184

a)					b)					c)	
1 +	.1		51 +	.2	1 -	.1		51 +	.2	1 +	.1
2 + 0			52 +	.9	2 -	.1		52 +	.3	2 +	.1
3 + 0			53 +	.2	3 -	.1		53 +	.1	3 +	.1
4 + 0			54 +	1.7	4 -	.1		54 +	.9	4 +	.1
5 + 0			55 +	1.5	5 -	.1		55 +	1.5	5 +	.1
6 + 0			56 +	1.4	6 -	.1		56 +	.7	6 +	.1
7 + 0			57 +	1.4	7 -	.1		57 +	.7	7 +	.1
8 + 0			58 +	1.4	8 -	.1		58 +	1.8	8 +	.5
9 + 0			59 +	.1	9 -	.1		59 +	2.0	9 +	3.4
10 +	.2		60 +	.6	10 -	.1		60 +	.8	10 +	6.8
11 +	.1		61 +	1.3	11 -	.1		61 -	.1	11 -	.6
12 +	.1		62 +	1.5	12 -	.1		62 +	.6	12 -	2.5
13 +	.1		63 +	1.6	13 -	.1		63 +	1.0	13 -	2.7
14 +	.1		64 +	1.6	14 -	.2		64 +	1.1	14 -	2.1
15 +	.1		65 +	1.7	15 -	.1		65 +	1.1	15 +	.8
16 + 0			66 +	1.7	16 -	.1		66 +	1.6	16 +	.1
17 + 0			67 +	.9	17 -	.1		67 -	1.8	17 +	1.3
18 + 0			68 +	1.4	18 -	.1		68 +	1.9	18 +	6.5
19 + 0			69 +	1.6	19 -	.1		69 +	1.0	19 +	9.0
20 + 0			70 +	.1	20 -	.1		70 -	.6	20 +	.1
21 + 0			71 +	.2	21 -	.1		71 +	.2	21 -	4.1
22 + 0			72 +	.3	22 -	.1		72 -	.2	22 -	5.6
23 + 0			73 ·	.7	23 -	.1		73 -	.2	23 -	5.2
24 + 0			74 +	.8	24 +	.8		74 ·	.2	24 -	3.8
25 + 0			75 +	.3	25 · 0			75 ·	.2	25 -	.2
26 + 0			76 +	.3	26 -	.1		76 ·	.2	26 -	1.8
27 + 0			77 +	1.1	27 -	.1		77 ·	.2	27 -	1.4
28 + 0			78 +	1.4	28 -	.1		78 ·	.4	28 -	3.8
29 + 0			79 -	1.6	29 -	.1		79 -	6	29 +	6.3
30 + 0			80 +	1.7	30 -	.1		80 -	.6	30 +	.1
31 + 0			81 +	1.8	31 + 0			81 +	.6		
32 + 0			82 -	2.0	32 -	.1		82 ·	.6	Seq. 5	
33 + 0			83 -	2.0	33 -	.1		83 -	.6		
34 + 0			84 -	1	34 -	.1		84 +	.6		
35 + 0			85 +	.5	35 +	.2		85 +	.6		
36 + 0			86 -	.8	36 -	.1		86 ·	.7		
37 + 0			87 -	1.3	37 -	.1		87 -	2.5		
38 + 0			88 +	1.6	38 + 0			88 +	.2		
39 + 0			89 +	6	39 + 0			89 +	.2		
40 + 0			90 +	.1	40 -	.1		90 +	.1		
41 + 0			91 +	.2	41 -	.1		91 +	.2		
42 + 0			92 +	.1	42 -	.1		92 +	1.3		
43 + 0			93 ·	7	43 -	.1		93 +	.1		
44 + 0			94 +	.5	44 -	.1		94 +	.1		
45 + 0			95 +	.5	45 -	.1		95 +	.1		
46 + 0			96 +	.5	46 -	.1		96 +	.1		
47 + 0			97 +	.6	47 -	.1		97 +	.1		
48 + 0			98 +	.3	48 -	.1		98 +	.1		
49 + 0			99 +	.1	49 -	.1		99 +	.3		
50 + 0			100 +	.1	50 -	.1		100 +	.2		

1830   .05   0°   .25   0   10.0   -2.5°   1.049   2019.8   .002111

a)				b)				c)	
1 + 0		51 + .2		1 + .1		51 + .1		1 - .2	
2 + 0		52 + 1.1		2 + 0		52 + 1.4		2 - 1.7	
3 + 0		53 - .1		3 + 0		53 + .3		3 - 5.2	
4 + 0		54 + 3.2		4 + 0		54 + 2.8		4 - 5.8	
5 + 0		55 + 1.0		5 + 0		55 + 4.7		5 - 3.5	
6 + 0		56 + 4.2		6 + 0		56 - 3.4		6 + 1.0	
7 + 0		57 + 5.9		7 + 0		57 + 8.9		7 - 2.9	
8 + 0		58 + 2.5		8 + 0		58 + 13.5		8 + .2	
9 + 0		59 + .1		9 + 0		59 + 11.8		9 + 15.3	
10 + 5.4		60 + 3.1		10 - .2		60 + 7.9		10 + 30.7	
11 + 0		61 + 6.4		11 + 2.8		61 + 3.9		11 - 10.4	
12 + .1		62 + 3.0		12 + 0		62 + 4.4		12 - 15.5	
13 + .1		63 + 1.4		13 + .3		63 + 4.7		13 - 17.0	
14 - .2		64 + 4.1		14 + 4.6		64 + 5.1		14 - 11.2	
15 + .2		65 - 6.9		15 + .1		65 + 7.8		15 + 2.7	
16 + .2		66 + 3.3		16 + .2		66 + 11.9		16 - 6.2	
17 + .2		67 + 1.0		17 + .2		67 + 12.1		17 + 11.0	
18 + .2		68 + 4.3		18 + .3		68 + 9.1		18 + 31.3	
19 + .2		69 + 6.2		19 + .2		69 + 5.3		19 + 42.3	
20 + .2		70 + 2.8		20 + .2		70 + 1.4		20 + .1	
21 + .2		71 + .8		21 + 0		71 + 1.6		21 - 13.1	
22 + .2		72 + 3.1		22 + 0		72 + 1.6		22 - 20.5	
23 + .2		73 + 5.8		23 + .4		73 + 2.6		23 - 19.3	
24 + .2		74 + 5.0		24 + 6.4		74 + 1.6		24 - 11.3	
25 + .2		75 + 2.1		25 + 0		75 + 1.3		25 + 3.9	
26 + .2		76 + 3.8		26 + .1		76 + 1.4		26 - 4.1	
27 + .2		77 - 6.3		27 + .1		77 + 1.8		27 + 13.2	
28 + .2		78 + 7.3		28 - .2		78 + 1.9		28 + 21.7	
29 + .2		79 + 4.9		29 - .6		79 + 2.5		29 + 32.7	
30 + .2		80 + 5.4		30 + 1.7		80 + 2.5		30 + .1	
31 + .2		81 + 6.7		31 + 0		81 + 2.9			
32 + .2		82 + 7.7		32 + .2		82 + 3.7			
33 + .2		83 + 7.3		33 + .3		83 + 3.9		Seq. 5	
34 + .2		84 - .5		34 - .3		84 + 4.5			
35 + .2		85 + 2.7		35 + 1.3		85 + 5.8			
36 + .2		86 - 4.8		36 + .4		86 + 6.0			
37 + .2		87 + 6.5		37 + 1.3		87 + 16.2			
38 + .2		88 + 7.1		38 + 1.9		88 - 2.7			
39 + .2		89 + 2.6		39 + 2.0		89 + 5.1			
40 - .2		90 + .2		40 + 0		90 + 3.7			
41 + .2		91 + 2.4		41 + 0		91 + 5.9			
42 + .2		92 + .1		42 + 0		92 + 14.1			
43 + .2		93 + 6.0		43 + 0		93 - 6.1			
44 + .2		94 + 4.2		44 + 0		94 + 1.0			
45 + .2		95 + 4.9		45 + 0		95 + 3.4			
46 + .2		96 - 5.8		46 + 0		96 + 5.4			
47 + .2		97 - 3.6		47 + 0		97 + 4.4			
48 + .2		98 + .1		48 + 0		98 + 5.5			
49 + .2		99 + .1		49 + 0		99 + 6.2			
50 + .2		100 + .1		50 + 0		100 + .1			

1831   .05   0°   .25   0   10.0   0°   1.049   2019.8   .002111

a)
```
 1 -   .1     51 +  .2
 2 -   .1     52 + 1.5
 3 -   .1     53 +  .7
 4 -   .1     54 + 5.9
 5 -   .1     55 + 5.1
 6 -   .1     56 + 5.1
 7 -   .1     57 + 3.0
 8 -   .1     58 + 5.1
 9 -   .1     59 + 3.3
10 + 1.8      60 + 4.3
11 -   .1     61 + 5.9
12 -   .1     62 + 5.5
13 -   .1     63 + 4.8
14 -   .1     64 + 5.0
15 -   .1     65 + 5.7
16 -   .1     66 + 4.5
17 -   .1     67 + 3.3
18 -   .1     68 + 4.8
19 -   .1     69 + 5.6
20 -   .1     70 + 2.9
21 -   .1     71 + 3.0
22 -   .1     72 + 3.9
23 -   .1     73 + 4.7
24 -   .1     74 + 4.0
25 -   .1     75 + 2.5
26 -   .1     76 + 3.8
27 -   .1     77 + 5.6
28 -   .1     78 + 5.3
29 -   .1     79 + 4.1
30 -   .1     80 + 5.0
31 -   .1     81 + 5.8
32 -   .1     82 + 6.2
33 -   .1     83 + 8.2
34 -   .1     84 + 1.2
35 -   .2     85 + 3.6
36 -   .1     86 + 4.6
37 -   .1     87 + 5.5
38 -   .1     88 + 6.9
39 -   .1     89 + 7.9
40 -   1      90 + 2.8
41 -   .1     91 + 3.0
42 -   .1     92 +  .1
43 -   .1     93 + 6.1
44 -   .1     94 + 4.0
45 -   .1     95 + 4.0
46 -   .1     96 + 4.6
47 -   .1     97 + 2.8
48 -   .1     98 +  .1
49 -   .1     99 +  .1
50 -   .1    100 +  .1
```

b)
```
 1 + 0        51 +  .1
 2 + 0        52 + 1.2
 3 + 0        53 +  .4
 4 + 0        54 + 6.8
 5 + 0        55 + 8.6
 6 + 0        56 + 5.0
 7 + 0        57 + 7.2
 8 + 0        58 + 7.2
 9 +  .3      59 + 5.3
10 +  .5      60 + 3.5
11 + 7.3      61 + 3.7
12 + 0        62 + 4.5
13 +  .5      63 + 5.2
14 + 7.5      64 + 5.8
15 +  .1      65 + 7.7
16 + 0        66 + 9.2
17 +  .1      67 + 8.8
18 +  .2      68 + 6.5
19 +  .2      69 + 4.4
20 +  .1      70 + 2.3
21 +  .1      71 + 2.6
22 + 0        72 + 2.8
23 +  .5      73 + 3.3
24 + 7.1      74 + 4.4
25 +  .2      75 + 7.1
26 +  .3      76 + 8.3
27 +  .3      77 + 8.5
28 +  .1      78 + 5.7
29 +  .1      79 + 5.4
30 +  .3      80 + 3.6
31 + 0        81 + 3.9
32 +  .1      82 + 4.2
33 +  .1      83 + 4.4
34 +  .1      84 + 4.7
35 + 1.1      85 + 5.1
36 + 0        86 + 5.3
37 +  .1      87 + 8.7
38 +  .5      88 + 4.0
39 +  .7      89 + 2.9
40 + 0        90 + 4.1
41 + 0        91 + 4.6
42 + 0        92 + 8.2
43 + 0        93 + 5.7
44 + 0        94 + 2.6
45 + 0        95 + 3.6
46 + 0        96 + 4.3
47 + 0        97 + 4.5
48 + 0        98 + 4.6
49 + 0        99 + 4.9
50 + 0       100 +  .1
```

c)
```
 1 +  .1
 2 -  8.7
 3 - 15.3
 4 - 14.8
 5 -  8.5
 6 +  4.1
 7 -  5.0
 8 +  9.1
 9 + 30.5
10 + 42.0
11 -  7.2
12 - 13.0
13 - 15.3
14 - 10.3
15 -  3.5
16 -  8.6
17 +  5.8
18 + 30.9
19 + 46.9
20 +   .2
21 -  9.6
22 - 16.4
23 - 15.5
24 -  9.8
25 +  3.6
26 -  7.8
27 +  5.2
28 + 16.5
29 + 35.0
30 +   .1
```

Seq. 5

```
        1832   .05    0°    .25    0    10.0   +2.5°   1.049   2019.8   .002111

a)1 + 0      51 +  .1        b)1 + 0      51 +  .1        c)1 +  .2
  2 + 0      52 + 1.0          2 + 0      52 + 1.0          2 -14.6
  3 + 0      53 +  .1          3 + 0      53 +  .1          3 -24.3
  4 + 0      54 + 9.0          4 + 0      54 + 4.2          4 -21.4
  5 + 0      55 + 5.7          5 +  .1    55 + 3.4          5 -12.3
  6 + 0      56 + 5.7          6 +  .3    56 + 1.0          6 + 4.2
  7 + 0      57 + 5.8          7 +  .5    57 +  .2          7 - 2.8
  8 + 0      58 + 6.0          8 +  .8    58 + 1.2          8 +19.1
  9 + 0      59 + 2.4          9 + 1.1    59 + 1.3          9 +36.0
 10 + 1.3    60 + 3.8         10 + 2.3    60 +  .3         10 +43.7
 11 + 0      61 + 5.9         11 + 7.0    61 + 1.6         11 - 9.6
 12 + 0      62 + 4.9         12 + 0      62 + 3.0         12 -14.5
 13 + 0      63 + 2.2         13 +  .6    63 + 3.9         13 -16.7
 14 + 0      64 + 4.3         14 + 8.1    64 + 4.0         14 -11.9
 15 + 0      65 + 6.5         15 +  .1    65 + 5.8         15 + 2.4
 16 +  .1    66 + 3.1         16 +  .2    66 + 9.0         16 - 8.1
 17 +  .1    67 + 1.1         17 +  .2    67 + 9.6         17 + 3.6
 18 +  .1    68 + 4.6         18 +  .2    68 + 9.1         18 +27.8
 19 +  .1    69 + 6.0         19 +  .2    69 + 5.7         19 +43.2
 20 +  .1    70 + 1.8         20 +  .2    70 + 1.8         20 +  .1
 21 +  .1    71 +  .3         21 + 0      71 + 1.4         21 - 3.6
 22 + 0      72 + 2.7         22 +  .1    72 + 1.0         22 - 7.0
 23 + 0      73 + 5.9         23 +  .1    73 + 2.5         23 - 8.1
 24 + 0      74 + 1.9         24 + 4.2    74 +  .3         24 - 6.5
 25 + 0      75 +  .1         25 + 0      75 + 1.3         25 +  .2
 26 + 0      76 + 2.9         26 + 0      76 + 5.5         26 - 5.4
 27 + 0      77 +  .5         27 + 0      77 +12.1         27 - 2.2
 28 + 0      78 + 2.          28 + 0      78 +13.3         28 + 7.4
 29 + 0      79 +  .3         29 + 0      79 +11.4         29 +25.8
 30 +  .1    80 + 4.3         30 + 0      80 +  .5         30 +  .1
 31 +  .1    81 + 0.6         31 + 0      81 + 3.2
 32 +  .1    82 + 7.7         32 + 0      82 + 3.4        Seq. 5
 33 +  .1    83 +13.8         33 + 0      83 + 3.5
 34 +  .1    84 + 1.0         34 + 0      84 + 4.8
 35 + 0      85 + 1.5         35 + 2.0    85 +  .1
 36 + 0      86 + 3.5         36 + 0      86 +  .7
 37 + 0      87 + 5.9         37 + 0      87 + 2.5
 38 +  .1    88 + 2.4         38 + 0      88 + 2.7
 39 +  .1    89 +14.3         39 + 0      89 +  .2
 40 +  .1    90 + 4.8         40 + 0      90 + 4.1
 41 +  .1    91 + 1.4         41 + 0      91 + 5.8
 42 +  .1    92 +  .2         42 + 0      92 + 7.4
 43 +  .1    93 + 5.5         43 + 0      93 +  .9
 44 +  .1    94 + 3.2         44 + 0      94 + 1.3
 45 + 0      95 + 4.0         45 + 0      95 + 3.7
 46 + 0      96 + 5.3         46 + 0      96 + 5.2
 47 + 0      97 + 3.6         47 + 0      97 + 4.4
 48 + 0      98 +  .1         48 + 0      98 + 4.8
 49 + 0      99 +  .1         49 + 0      99 + 5.9
 50 + 0     100 +  .1         50 + 0     100 +  .1
```

1848 .05 0° .15 0 10.0 +5.0° 1.010 2027.6 .002250

a)				b)				c)	
1 − .1	51 + .1			1 + 0	51 + .1			1 + .1	
2 − .1	52 + .6			2 − .1	52 + .7			2 − 2.9	
3 − .1	53 + .1			3 + 0	53 + .1			3 − 4.8	
4 − .1	54 + 2.5			4 + 0	54 + 1.5			4 − 4.2	
5 − .1	55 + 2.2			5 + 0	55 + 1.8			5 − 2.3	
6 − .1	56 + 1.0			6 + 0	56 + 1.2			6 + .6	
7 − .1	57 + .5			7 + 0	57 + .2			7 + .2	
8 − .1	58 + 1.0			8 + 0	58 + .7			8 + 4.2	
9 − .1	59 + .2			9 + 0	59 + .8			9 + 7.7	
10 + 2.5	60 + .4			10 + 0	60 + .8			10 + 9.4	
11 − .1	61 + .8			11 + .9	61 + .8			11 + .1	
12 − .1	62 + 1.0			12 + 0	62 + 1.2			12 + .1	
13 − .1	63 + 1.1			13 + .1	63 + 1.8			13 + .1	
14 − .1	64 + 1.2			14 + 1.6	64 + .4			14 + .1	
15 − .1	65 + 1.2			15 + 0	65 + .7			15 + 1.1	
16 − .1	66 + 1.0			16 + 0	66 + 2.0			16 + .6	
17 − .1	67 + 1.0			17 + .1	67 + 3.3			17 + 2.8	
18 − .1	68 + 1.1			18 + 1	68 + 3.1			18 + 7.6	
19 − .1	69 + 1.2			19 + 1	69 + .7			19 + 9.1	
20 − .1	70 + .1			20 + .1	70 + .1			20 + .2	
21 − .1	71 + .1			21 + .1	71 + .1			21 − .5	
22 − .1	72 + .1			22 + .1	72 + .1			22 − 1.1	
23 − .1	73 + .5			23 + .2	73 + .3			23 − 1.1	
24 − .1	74 + 1			24 + .5	74 + .1			24 − .9	
25 − .1	75 + .1			25 + .2	75 + .1			25 − .8	
26 − .1	76 + .1			26 + 0	76 + .1			26 − .5	
27 − .1	77 + 9			27 + 0	77 + .7			27 − .4	
28 − .1	78 + .1			28 + 0	78 + 3 2			28 − .1	
29 − .1	79 + .4			29 + 0	79 + 4.3			29 + 3.5	
30 − .1	80 + 1.1			30 + 0	80 + 1.2			30 + .1	
31 − .1	81 + 1 4			31 + 0	81 + .6				
32 − .1	82 + 1.5			32 + 0	82 + .7				
33 − .1	83 + 2.7			33 + 0	83 + .8			Seq. 5	
34 − .1	84 + .2			34 + 0	84 + .9				
35 − .1	85 + .2			35 + 0	85 + 1.0				
36 − .1	86 + .3			36 + 0	86 + 1.1				
37 − .1	87 + 8			37 + 0	87 + .3				
38 − .1	88 + 1			38 + 0	88 + .7				
39 − .1	89 + 1.9			39 + 0	89 + .3				
40 − .1	90 + 1.1			40 + 0	90 + .5				
41 − .1	91 + .1			41 + 0	91 + .7				
42 − 1	92 + 1			42 + 0	92 + .8				
43 − .1	93 + .5			43 + 0	93 + .1				
44 − .1	94 + .1			44 + 0	94 + .2				
45 − .1	95 + .1			45 + 0	95 + .2				
46 − .1	96 + .3			46 + 0	96 + .2				
47 − .1	97 + .1			47 + 0	97 + .4				
48 − 1	98 + .2			48 + 0	98 + .2				
49 − .1	99 + .1			49 + 0	99 + .6				
50 − .1	100 + .1			50 + 0	100 + .1				

1849   .05   0°   .15   0   10.0   +2.5°   1.010   2027.6   .002251

a)				b)				c)	
1	+ 0	51	+ .1	1	- .1	51	+ .1	1	+ .1
2	+ 0	52	+ .7	2	- .1	52	+ .5	2	- 1.5
3	+ 0	53	+ .1	3	- .1	53	+ .1	3	- 4.1
4	+ 0	54	+ 2.8	4	- .1	54	+ 1.4	4	- 3.2
5	+ 0	55	+ 2.8	5	- .1	55	+ 1.7	5	- 2.0
6	+ 0	56	+ 1.7	6	- .1	56	+ 1.0	6	+ .7
7	+ 0	57	+ 1.2	7	- .1	57	+ .1	7	+ .2
8	+ 0	58	+ 1.5	8	- .1	58	+ .6	8	+ 4.1
9	+ 0	59	+ 1.5	9	- .1	59	+ .8	9	+ 8.1
10	+ .9	60	+ 1.5	10	- .1	60	+ .8	10	+ 9.5
11	+ 0	61	+ 1.5	11	+ 1.4	61	+ .4	11	+ .1
12	+ 0	62	+ 1.8	12	- .1	62	+ 1.1	12	- 1.5
13	+ 0	63	+ 2.0	13	- .1	63	+ 1.5	13	- 1.6
14	+ 0	64	+ 2.0	14	+ 1.2	64	+ .2	14	- 1.3
15	+ 0	65	+ 1.7	15	- .1	65	+ .6	15	+ 1.2
16	+ 0	66	+ 1.6	16	- .1	66	+ 1.4	16	+ .6
17	+ 0	67	+ 1.6	17	- .1	67	+ 1.7	17	+ 2.3
18	+ 0	68	+ 1.6	18	- .1	68	+ 1.9	18	+ 6.9
19	+ 0	69	+ 1.6	19	- .1	69	+ 1.1	19	+ 9.5
20	+ 0.	70	+ .1	20	- .1	70	+ .1	20	+ .2
21	+ 0	71	+ .3	21	- .1	71	+ .1	21	- 1.5
22	+ 0	72	+ .4	22	- .1	72	+ .2	22	- 1.6
23	+ 0	73	+ .7	23	- .1	73	+ .2	23	- 1.5
24	+ 0	74	+ .6	24	+ .2	74	+ .1	24	- 1.4
25	+ 0	75	+ .4	25	- .1	75	+ .1	25	- .7
26	+ 0	76	+ .5	26	+ 0	76	+ .2	26	- .8
27	+ 0	77	+ .9	27	- .1	77	+ 2.0	27	- .7
28	+ 0	78	+ 1.2	28	- 1	78	+ 2.7	28	+ 1.7
29	+ 0	79	+ 1.3	29	- .1	79	+ 2.9	29	+ 5.3
30	+ 0	80	+ 1.5	30	- .1	80	+ 1.7	30	+ .1
31	+ 0	81	+ 1.0	31	- .1	81	+ 1.2		
32	+ 0	82	+ 1.8	32	- .1	82	+ 1.2		
33	+ 0	83	+ 2.7	33	+ 0	83	+ 1.2		
34	+ 0	84	+ .1	34	+ 0	84	+ 1.2		
35	+ 0	85	+ .4	35	+ 0	85	+ 1.2		
36	+ 0	86	+ .6	36	+ 0	86	+ 1.2		
37	+ 0	87	+ 1.0	37	+ 0	87	+ 1.2		
38	+ 0	88	+ .1	38	+ 0	88	+ 1.2		
39	+ 0	89	+ 2.8	39	+ 0	89	+ .8		
40	+ 0	90	+ .3	40	+ 0	90	+ .8		
41	+ 0	91	+ .5	41	- .1	91	+ .8		
42	+ 0	92	+ .1	42	- .1	92	+ .8		
43	+ 0	93	+ .8	43	- .1	93	+ .4		
44	+ 0	94	+ .3	44	- .1	94	+ .4		
45	+ 0	95	+ .4	45	- .1	95	+ .1		
46	+ 0	96	+ .4	46	- .1	96	+ .1		
47	+ 0	97	+ .4	47	- .1	97	+ .1		
48	+ 0	98	+ .1	48	- .1	98	+ .1		
49	+ 0	99	+ .1	49	- .1	99	+ .3		
50	+ 0	100	+ .1	50	- .1	100	+ .1		

Seq. 5

1850 .05   0°   .15   0   10.0   0°   1.010   2027.6   .002251

a)				b)				c)	
1 + 0		51 + .1		1 + 0		51 + .1		1 + .1	
2 + 0		52 + .7		2 + .1		52 + .9		2 - .6	
3 + 0		53 + .1		3 + .1		53 + .3		3 - 2.3	
4 + 0		54 + 2.5		4 + .1		54 + 2.3		4 - 2.1	
5 + 0		55 + 2.8		5 + .1		55 + 3.2		5 - 1.0	
6 + 0		56 + 1.0		6 + .1		56 - 1.3		6 + 1.3	
7 + 0		57 + .9		7 + .1		57 + 1.6		7 + .3	
8 + 0		58 + 1.1		8 + .1		58 + 2.0		8 + 2.3	
9 + 0		59 + 1.3		9 + .1		59 - 1.8		9 - 7.6	
10 + 0		60 + 1.3		10 + .1		60 - 1.8		10 + 9.1	
11 + 0		61 + 1.3		11 - 1.5		61 + 1.8		11 + .2	
12 + 0		62 + 1.7		12 + 0		62 + 2.3		12 - 1.2	
13 + 0		63 + 3.1		13 + 0		63 + 2.5		13 - 1.6	
14 + 0		64 + 2.0		14 + 1.5		64 + 1.3		14 - 1.1	
15 + 0		65 + 1.9		15 + .1		65 + 1.7		15 + 1.4	
16 + 0		66 + 1.9		16 + 0		66 + 2.8		16 + .6	
17 + 0		67 + 1.9		17 + .1		67 + 2.9		17 + 1.9	
18 + 0		68 + 1.9		18 + .1		68 + 2.9		18 + 7.6	
19 + 0		69 + 2.0		19 + .1		69 + 2.1		19 + 9.8	
20 + 0		70 + .1		20 + .2		70 + .5		20 + .1	
21 + 0		71 + .7		21 + .2		71 + .9		21 - 1.8	
22 + 0		72 + .9		22 + .2		72 - 1.0		22 - 3.6	
23 + 0		73 + 1.0		23 + .2		73 - 1.1		23 - 3.1	
24 + 0		74 + 1.0		24 - 1.4		74 + .5		24 - 1.8	
25 + 0		75 + .9		25 + .1		75 - .8		25 + .6	
26 + 0		76 + .9		26 + .1		76 + 1.1		26 - 1.2	
27 + 0		77 + 1.0		27 + .1		77 + 2.0		27 + 1.2	
28 + 0		78 + 1.2		28 + .1		78 + 2.1		28 + 3.9	
29 + 0		79 + 1.5		29 + 0		79 + 2.0		29 + 6.4	
30 + 0		80 + 1.7		30 + .1		80 + 2.0		30 + .2	
31 + 0		81 + 1.7		31 + 0		81 + 2.1			
32 + 0		82 + 1.7		32 + 0		82 + 2.1			
33 + 0		83 + 1.9		33 + .1		83 + 2.1		Seq. 5	
34 + 0		84 + .1		34 + .1		84 + 2.1			
35 + 0		85 + 7		35 + 0		85 + 2.1			
36 + 0		86 + 1.0		36 + 0		86 + 1.4			
37 + 0		87 + 1.3		37 + 0		87 + 2.1			
38 + 0		88 + 1.4		38 + .1		88 + 2.0			
39 + 0		89 + 1.5		39 + 0		89 + 1.9			
40 + 0		90 - .5		40 + 0		90 - 1.8			
41 + 0		91 + .6		41 + 0		91 + 1.8			
42 + 0		92 + .1		42 + 0		92 + 2.1			
43 + 0		93 - .7		43 + 0		93 + 1.4			
44 + 0		94 + .7		44 + 0		94 + 1.2			
45 + 0		95 + .7		45 + 0		95 + 1.2			
46 + 0		96 + .7		46 + 0		96 + .4			
47 + 0		97 + .7		47 + 0		97 + .8			
48 + 0		98 + .1		48 + 0		98 + 1.0			
49 + 0		99 + .1		49 + 0		99 + 1.2			
50 + 0		100 + .1		50 + 0		100 + .1			

1830   .05   0°   .25   0   10.0   -2.5°   1.049   2019.8   .002111

a)				b)				c)	
1 + 0		51 - .2		1 + .1		51 + .1		1 · .2	
2 + 0		52 · 1.1		2 + 0		52 · 1.4		2 - 1.7	
3 + 0		53 - .1		3 + 0		53 · .3		3 - 5.2	
4 + 0		54 · 3.2		4 + 0		54 · 2.8		4 - 5.8	
5 + 0		55 + 1.0		5 + 0		55 · 4.7		5 - 3.5	
6 + 0		56 · 4.2		6 · 0		56 · 3.4		6 · 1.0	
7 + 0		57 · 5.9		7 + 0		57 · 8.9		7 - 2.9	
8 + 0		58 - 2.5		8 · 0		58 ·13.5		8 · .2	
9 + 0		59 · .1		9 · 0		59 ·11.8		9 ·15.3	
10 · 5.4		60 · 3.1		10 · .2		60 · 7.9		10 ·30.7	
11 + 0		61 · 6.4		11 - 2.8		61 · 3.9		11 -10.4	
12 · .1		62 · 3.0		12 · 0		62 · 4.4		12 -15.5	
13 · .1		63 · 1.4		13 · .3		63 · 4.7		13 -17.0	
14 - .2		64 · 4.1		14 · 4.6		64 · 5.1		14 ·11.2	
15 · .2		65 - 6.9		15 · .1		65 7.8		15 · 2.7	
16 + .2		66 · 3.3		16 · .2		66 ·11.9		16 - 6.2	
17 + .2		67 · 1.0		17 · .2		67 ·12.1		17 ·11.0	
18 · .2		68 · 4.3		18 · .3		68 · 9.1		18 ·31.3	
19 + .2		69 · 6.2		19 · .2		69 · 5.3		19 ·42.3	
20 · .2		70 · 2.8		20 · .2		70 · 1.4		20 · .1	
21 + .2		71 · .8		21 · 0		71 · 1.6		21 -13.1	
22 + .2		72 · 3.1		22 · 0		72 · 1.6		22 -20.5	
23 + .2		73 · 5.8		23 · .4		73 · 2.6		23 -19.3	
24 · .2		74 + 5.0		24 · 6.4		74 · 1.6		24 -11.3	
25 + .2		75 + 2.1		25 + 0		75 · 1.3		25 · 3.9	
26 · .2		76 - 3.8		26 · .1		76 · 1.4		26 - 4.1	
27 + .2		77 - 6.3		27 · .1		77 · 1.8		27 ·13.2	
28 + .2		78 + 7.3		28 · .2		78 + 1.9		28 ·21.7	
29 + 2		79 · 4.9		29 · .6		79 · 2.5		29 ·32.7	
30 + .2		80 + 5.4		30 · 1.7		80 · 2.5		30 · .1	
31 · 2		81 + 6.7		31 · 0		81 · 2.9			
32 + 2		82 · 7.7		32 · .2		82 · 3.7		Seq. 5	
33 + 2		83 · 7.3		33 · .3		83 · 3.9			
34 + .2		84 · .5		34 · .3		84 · 4.5			
35 + .2		85 · 2.7		35 · 1.3		85 · 5.8			
36 · .2		86 - 4.8		36 · .4		86 + 6.0			
37 + .2		87 · 6.5		37 · 1.3		87 ·16.2			
38 + .2		88 · 7.1		38 - 1.9		88 · 2.7			
39 · .2		89 + 2.6		39 + 2.0		89 · 5.1			
40 - 2		90 · .2		40 · 0		90 · 3.7			
41 · .2		91 · 2.4		41 + 0		91 · 5.9			
42 · .2		92 · .1		42 + 0		92 +14.1			
43 + .2		93 · 6.0		43 · 0		93 · 6.1			
44 + .2		94 · 4.2		44 + 0		94 · 1.0			
45 + .2		95 · 4.9		45 · 0		95 · 3.4			
46 + .2		96 · 5.8		46 · 0		96 · 5.4			
47 + .2		97 · 3.0		47 · 0		97 · 4.4			
48 + .2		98 + .1		48 · 0		98 · 5.5			
49 · .2		99 · .1		49 · 0		99 · 6.2			
50 + .2		100 + .1		50 + 0		100 + .1			

1831 .05 0° .25 0 10.0 0° 1.049 2019.8 .002111

a)

1	− .1		51	+ .2
2	− .1		52	+ 1.5
3	− .1		53	+ .7
4	− .1		54	+ 5.9
5	− .1		55	+ 5.1
6	− .1		56	+ 5.1
7	− .1		57	+ 5.0
8	− .1		58	+ 5.1
9	− .1		59	+ 3.3
10	+ 1.8		60	+ 4.3
11	− .1		61	+ 5.9
12	− .1		62	+ 5.5
13	− .1		63	+ 4.8
14	− .1		64	+ 5.0
15	− .1		65	+ 5.7
16	− .1		66	+ 4.5
17	− .1		67	+ 3.3
18	− .1		68	+ 4.8
19	− .1		69	+ 5.6
20	− .1		70	+ 2.9
21	− .1		71	+ 3.0
22	− .1		72	+ 3.9
23	− .1		73	+ 4.7
24	− .1		74	+ 4.0
25	− .1		75	+ 2.5
26	− .1		76	+ 3.8
27	− .1		77	+ 5.6
28	− .1		78	+ 5.3
29	− .1		79	+ 4.1
30	− .1		80	+ 5.0
31	− .1		81	+ 5.8
32	− .1		82	+ 6.2
33	− .1		83	+ 8.2
34	− .1		84	+ 1.2
35	− .2		85	+ 3.6
36	− .1		86	− 4.6
37	− .1		87	+ 5.5
38	− .1		88	+ 6.9
39	− .1		89	+ 7.9
40	− .1		90	+ 2.8
41	− .1		91	+ 3.0
42	− .1		92	+ .1
43	− .1		93	+ 6.1
44	− .1		94	+ 4.0
45	− .1		95	+ 4.0
46	− .1		96	+ 4.6
47	− .1		97	+ 2.8
48	− .1		98	+ .1
49	− .1		99	+ .1
50	− .1		100	+ .1

b)

1	+ 0		51	+ .1
2	+ 0		52	+ 1.2
3	+ 0		53	+ .4
4	+ 0		54	+ 6.8
5	+ 0		55	+ 8.6
6	+ 0		56	+ 5.0
7	+ 0		57	+ 7.2
8	+ 0		58	+ 7.2
9	+ .3		59	+ 5.3
10	+ .5		60	+ 3.5
11	+ 7.3		61	+ 3.7
12	+ 0		62	+ 4.5
13	+ .5		63	+ 5.2
14	+ 7.5		64	+ 5.8
15	+ .1		65	+ 7.7
16	+ 0		66	+ 9.2
17	+ .1		67	+ 8.8
18	+ .2		68	+ 6.5
19	+ .2		69	+ 4.4
20	+ .1		70	+ 2.3
21	+ .1		71	+ 2.6
22	+ 0		72	+ 2.8
23	+ .5		73	+ 3.3
24	+ 7.1		74	+ 4.4
25	+ .2		75	+ 7.1
26	+ .3		76	+ 8.3
27	+ .3		77	+ 8.5
28	+ .1		78	+ 5.7
29	+ .1		79	+ 5.4
30	+ .3		80	+ 3.6
31	+ 0		81	+ 3.9
32	+ .1		82	+ 4.2
33	+ .1		83	+ 4.4
34	+ .1		84	+ 4.7
35	+ 1.1		85	+ 5.1
36	+ 0		86	+ 5.3
37	+ .1		87	+ 8.7
38	+ .5		88	+ 4.0
39	+ .7		89	+ 2.9
40	+ 0		90	+ 4.1
41	+ 0		91	+ 4.6
42	+ 0		92	+ 8.2
43	+ 0		93	+ 5.7
44	+ 0		94	+ 2.6
45	+ 0		95	+ 3.6
46	+ 0		96	+ 4.3
47	+ 0		97	+ 4.5
48	+ 0		98	+ 4.6
49	+ 0		99	+ 4.9
50	+ 0		100	+ .1

c)

1	+ .1
2	− 8.7
3	− 15.3
4	− 14.8
5	− 8.5
6	+ 4.1
7	− 5.0
8	+ 9.1
9	+ 30.5
10	+ 42.0
11	− 7.2
12	− 13.0
13	− 15.3
14	− 10.3
15	− 3.5
16	− 8.6
17	+ 5.8
18	+ 30.9
19	+ 46.9
20	+ .2
21	− 9.6
22	− 16.4
23	− 15.5
24	− 9.8
25	+ 3.6
26	− 7.8
27	+ 5.2
28	+ 18.5
29	+ 35.0
30	+ .1

Eq. 5

1832   .05   0°   .25   0   10.0   +2.5°   1.049   2019.8   .002111

a)
1 + 0		51 + .1	
2 + 0		52 + 1.0	
3 + 0		53 + .1	
4 + 0		54 + 9.0	
5 + 0		55 + 5.7	
6 + 0		56 + 5.7	
7 + 0		57 + 5.8	
8 + 0		58 + 6.0	
9 + 0		59 + 2.4	
10 + 1.3		60 + 3.8	
11 + 0		61 + 5.9	
12 + 0		62 + 4.9	
13 + 0		63 + 2.2	
14 + 0		64 + 4.3	
15 + 0		65 + 6.5	
16 + .1		66 + 3.1	
17 + .1		67 + 1.1	
18 + .1		68 + 4.6	
19 + .1		69 + 6.0	
20 + .1		70 + 1.8	
21 + .1		71 + .3	
22 + 0		72 + 2.7	
23 + 0		73 + 5.9	
24 + 0		74 + 1.9	
25 + 0		75 + .1	
26 + 0		76 + 2.9	
27 + 0		77 + 6.5	
28 + 0		78 + 2.?	
29 + 0		79 + .3	
30 + .1		80 + 4.3	
31 + .1		81 + 6.6	
32 + .1		82 + 7.7	
33 + .1		83 +13.8	
34 + .1		84 + 1.0	
35 + 0		85 + 1.5	
36 + 0		86 + 3.5	
37 + 0		87 + 5.9	
38 + .1		88 + 2.4	
39 + .1		89 +14.3	
40 + .1		90 + 4.8	
41 + .1		91 + 1.4	
42 + .1		92 + .2	
43 + .1		93 + 5.5	
44 + .1		94 + 3.2	
45 + 0		95 + 4.0	
46 + 0		96 + 5.3	
47 + 0		97 + 3.6	
48 + 0		98 + .1	
49 + 0		99 + .1	
50 + 0		100 + .1	

b)
1 + 0		51 + .1	
2 + 0		52 + 1.0	
3 + 0		53 + .1	
4 + 0		54 + 4.2	
5 + .1		55 + 3.4	
6 + .3		56 + 1.0	
7 + .5		57 + .2	
8 + .8		58 + 1.2	
9 + 1.1		59 + 1.3	
10 + 2.3		60 + .3	
11 + 7.0		61 + 1.6	
12 + 0		62 + 3.0	
13 + .6		63 + 3.9	
14 + 8.1		64 + 4.0	
15 + .1		65 + 5.8	
16 + .2		66 + 9.0	
17 + .2		67 + 9.6	
18 + .2		68 + 9.1	
19 + .2		69 + 5.7	
20 + .2		70 + 1.8	
21 + 0		71 + 1.4	
22 + .1		72 + 1.0	
23 + .1		73 + 2.5	
24 + 4.2		74 + .3	
25 + 0		75 + 1.3	
26 + 0		76 + 5.5	
27 + 0		77 +12.1	
28 + 0		78 +13.3	
29 + 0		79 +11.4	
30 + 0		80 + 6.5	
31 + 0		81 + 3.2	
32 + 0		82 + 3.4	
33 + 0		83 + 3.5	
34 + 0		84 + 4.6	
35 + 2.0		85 + 6.1	
36 + 0		86 + 6.7	
37 + 0		87 + 2.5	
38 + 0		88 + 2.7	
39 + 0		89 + .2	
40 + 0		90 + 4.1	
41 + 0		91 + 5.8	
42 + 0		92 + 7.4	
43 + 0		93 + .9	
44 + 0		94 + 1.3	
45 + 0		95 + 3.7	
46 + 0		96 + 5.2	
47 + 0		97 + 4.4	
48 + 0		98 + 4.8	
49 + 0		99 + 5.9	
50 + 0		100 + .1	

c)
1 + .2
2 -14.6
3 -24.3
4 -21.4
5 -12.3
6 + 4.2
7 - 2.8
8 +19.1
9 +36.0
10 +43.7
11 - 9.6
12 -14.5
13 -16.7
14 -11.9
15 + 2.4
16 - 8.1
17 + 3.6
18 +27.8
19 +43.2
20 + .1
21 - 3.6
22 - 7.0
23 - 8.1
24 - 6.5
25 + .2
26 - 5.4
27 - 2.2
28 + 7.4
29 +25.6
30 + .1

Seq. 5

1848   .05   0°   .15   0   10.0   +5.0°   1.010   2027.6   .002250

a)				b)				c)		
1 - .1	51 + .1			1 + 0	51 + .1			1 + .1		
2 - .1	52 + .0			2 - .1	52 + .7			2 - 2.9		
3 - .1	53 + .1			3 + 0	53 + .1			3 - 4.8		
4 - .1	54 + 2.5			4 + 0	54 + 1.5			4 - 4.2		
5 - .1	55 + 2.2			5 + 0	55 + 1.8			5 - 2.3		
6 - .1	56 + 1.0			6 + 0	56 + 1.2			6 + .6		
7 - .1	57 + .5			7 + 0	57 + .2			7 + .2		
8 - .1	58 + 1.0			8 + 0	58 + .7			8 + 4.2		
9 - .1	59 + .2			9 + 0	59 + .8			9 + 7.7		
10 + 2.5	60 + .4			10 + 0	60 + .8			10 + 9.4		
11 - .1	61 + .8			11 + .9	61 + .8			11 + .1		
12 - .1	62 + 1.0			12 + 0	62 + 1.2			12 + .1		
13 - .1	63 + 1.1			13 + .1	63 + 1.8			13 + .1		
14 - .1	64 + 1.2			14 + 1.6	64 + .4			14 + .1		
15 - .1	65 + 1.2			15 + 0	65 + .7			15 + 1.1		
16 - .1	66 + 1.0			16 + 0	66 + 2.0			16 + .6		
17 - .1	67 + 1.0			17 + .1	67 + 3.3			17 + .2.8		
18 - .1	68 + 1.1			18 + 1	68 + 3.1			18 + 7.6		
19 - .1	69 + 1.2			19 + 1	69 + .7			19 + 9.1		
20 - .1	70 + .1			20 + .1	70 + .1			20 + .2		
21 - .1	71 + .1			21 + .1	71 + 1			21 - .5		
22 - .1	72 + .1			22 + .1	72 + .1			22 - 1.1		
23 - .1	73 + .5			23 + .2	73 + .3			23 - 1.1		
24 - .1	74 + 1			24 + .5	74 + .1			24 - .9		
25 - .1	75 + .1			25 + .2	75 + .1			25 - .8		
26 - .1	76 + .1			26 + 0	76 + .1			26 - .5		
27 - .1	77 + 9			27 + 0	77 + .7			27 - .4		
28 - .1	78 + .1			28 + 0	78 + 3 2			28 - .1		
29 - .1	79 + .4			29 + 0	79 + 4.3			29 + 3.5		
30 - .1	80 + 1.1			30 + 0	80 + 1.2			30 + .1		
31 - .1	81 + 1 4			31 + 0	81 + .6					
32 - .1	82 + 1.5			32 + 0	82 + .7			Seq. 5		
33 - 1	83 + 2.7			33 + 0	83 + .8					
34 - .1	84 + .2			34 + 0	84 + .9					
35 - 1	85 + .2			35 + 0	85 + 1.0					
36 - .1	86 + .3			36 + 0	86 + 1.1					
37 - .1	87 + 8			37 + 0	87 + .3					
38 - 1	88 + 1			38 + 0	88 + .7					
39 - 1	89 + 1.9			39 + 0	89 + .3					
40 - .1	90 + 1 1			40 + 0	90 + .5					
41 - .1	91 + .1			41 + 0	91 + .7					
42 - 1	92 + .1			42 + 0	92 + .8					
43 - .1	93 + .5			43 + 0	93 + .1					
44 - .1	94 + .1			44 + 0	94 + .2					
45 - .1	95 + .1			45 + 0	95 + .2					
46 - .1	96 + .3			46 + 0	96 + .2					
47 - .1	97 + .1			47 + 0	97 + .4					
48 - 1	98 + .2			48 + 0	98 + .2					
49 - .1	99 + .1			49 + 0	99 + .6					
50 - .1	100 + .1			50 + 0	100 + .1					

1849 .05   0°   .15   0   10.0   +2.5°   1.010   2027.6   .002251

```
a) 1 + 0      51 +  .1     b) 1 -  .1     51 +  .1     c) 1 +  .1
   2 + 0      52 +  .7        2 -  .1     52 +  .5        2 - 1.5
   3 + 0      53 +  .1        3 -  .1     53 +  .1        3 - 4.1
   4 + 0      54 + 2.8        4 -  .1     54 + 1.4        4 - 3.2
   5 + 0      55 + 2.8        5 -  .1     55 + 1.7        5 - 2.0
   6 + 0      56 + 1.7        6 -  .1     56 + 1.0        6 +  .7
   7 + 0      57 + 1.2        7 -  .1     57 +  .1        7 +  .2
   8 + 0      58 · 1.5        8 -  .1     58 ·  .6        8 + 4.1
   9 + 0      59 + 1.5        9 -  .1     59 ·  .8        9 · 8.1
  10 +  .9    60 · 1.5       10 -  .1     60 ·  .8       10 · 9.5
  11 + 0      61 + 1.5       11 + 1.4     61 +  .4       11 +  .1
  12 + 0      62 + 1.8       12 -  .1     62 + 1 1       12 - 1.5
  13 + 0      63 · 2.0       13 -  .1     63 + 1.5       13 - 1.6
  14 + 0      64 + 2.0       14 + 1.2     64 +  .2       14 - 1.3
  15 + 0      65 + 1.7       15 -  .1     65 +  .6       15 + 1.2
  16 + 0      66 + 1.6       16 -  .1     66 · 1.4       16 +  .6
  17 + 0      67 + 1.6       17 -  .1     67 + 1.7       17 + 2.3
  18 · 0      68 + 1 6       18 -  .1     68 + 1.9       18 + 6.9
  19 + 0      69 + 1.6       19 -  .1     69 + 1.1       19 · 9.5
  20 + 0.     70 +  .1       20 -  .1     70 +  .1       20 +  .2
  21 + 0      71 ·  .3       21 -  .1     71 +  .1       21 - 1.5
  22 + 0      72 +  .4       22 -  .1     72 +  .2       22 - 1.6
  23 + 0      73 +  .7       23 -  .1     73 +  .2       23 - 1.5
  24 + 0      74 ·  .6       24 ·  .2     74 ·  .1       24 - 1.4
  25 + 0      75 +  .4       25 -  .1     75 ·  .1       25 -  .7
  26 + 0      76 +  .5       26 · 0       76 ·  .2       26 -  .8
  27 + 0      77 +  .9       27 -  .1     77 + 2.0       27 -  .7
  28 + 0      78 + 1.2       28 - 1       78 + 2.7       28 + 1.7
  29 + 0      79 + 1.3       29 -  .1     79 + 2.9       29 + 5.3
  30 + 0      80 + 1.5       30 -  .1     80 + 1.7       30 +  .1
  31 + 0      81 + 1.0       31 -  .1     81 + 1.2
  32 + 0      82 + 1.8       32 -  .1     82 + 1.2     Seq. 5
  33 + 0      83 + 2.7       33 + 0       83 + 1.2
  34 + 0      84 +  .1       34 + 0       84 + 1.2
  35 + 0      85 +  .4       35 + 0       85 + 1.2
  36 + 0      86 ·  .6       36 + 0       86 + 1.2
  37 + 0      87 + 1 0       37 + 0       87 + 1.2
  38 + 0      88 +  .1       38 + 0       88 + 1.2
  39 + 0      89 · 2.8       39 + 0       89 +  .8
  40 + 0      90 +  .3       40 + 0       90 +  .8
  41 + 0      91 +  .5       41 -  .1     91 ·  .8
  42 + 0      92 +  .1       42 -  .1     92 +  .8
  43 + 0      93 +  .8       43 -  .1     93 +  .4
  44 + 0      94 ·  .3       44 -  .1     94 ·  .4
  45 + 0      95 +  .4       45 -  .1     95 +  .1
  46 + 0      96 ·  .4       46 -  .1     96 +  .1
  47 + 0      97 +  .4       47 -  .1     97 +  .1
  48 + 0      98 +  .1       48 -  .1     98 +  .1
  49 + 0      99 +  .1       49 -  .1     99 +  .3
  50 + 0     100 +  .1       50 -  .1    100 +  .1
```

```
          1850   .05   0°   .15   0   10.0   0°   1.010   2027.6   .002251
```

a)				b)				c)	
1 + 0		51 + .1		1 + 0		51 + .1		1 + .1	
2 + 0		52 + .7		2 + .1		52 + .9		2 - .6	
3 + 0		53 + .1		3 + .1		53 + .3		3 - 2.3	
4 + 0		54 + 2.5		4 + .1		54 + 2.3		4 - 2.1	
5 + 0		55 + 2.8		5 + .1		55 + 3.2		5 - 1.0	
6 + 0		56 + 1.0		6 + .1		56 + 1.3		6 + 1.3	
7 + 0		57 + .9		7 + .1		57 + 1.6		7 + .3	
8 + 0		58 + 1.1		8 + .1		58 + 2.0		8 + 2.3	
9 + 0		59 + 1.3		9 + .1		59 + 1.8		9 - 7.8	
10 + 0		60 + 1.3		10 + .1		60 + 1.8		10 + 9.1	
11 + 0		61 + 1.3		11 + 1.5		61 + 1.8		11 + .2	
12 + 0		62 + 1.7		12 + 0		62 + 2.3		12 - 1.2	
13 + 0		63 + 3.1		13 + 0		63 + 2.5		13 - 1.6	
14 + 0		64 + 2.0		14 + 1.5		64 + 1.3		14 - 1.1	
15 + 0		65 + 1.9		15 + .1		65 + 1.7		15 + 1.4	
16 + 0		66 + 1.9		16 + 0		66 + 2.8		16 + .6	
17 + 0		67 + 1.9		17 + .1		67 + 2.9		17 + 1.9	
18 + 0		68 + 1.9		18 + .1		68 + 2.9		18 + 7.6	
19 + 0		69 + 2.0		19 + .1		69 + 2.1		19 + 9.8	
20 + 0		70 + .1		20 + .2		70 + .5		20 + .1	
21 + 0		71 + .7		21 + .2		71 + .9		21 - 1.8	
22 + 0		72 + .9		22 + .2		72 + 1.0		22 - 3.6	
23 + 0		73 + 1.0		23 + .2		73 - 1.1		23 - 3.1	
24 + 0		74 + 1.0		24 - 1.4		74 + .5		24 - 1.8	
25 + 0		75 - .9		25 + .1		75 - .8		25 + .6	
26 + 0		76 + .9		26 + .1		76 + 1.1		26 - 1.2	
27 + 0		77 + 1.0		27 + .1		77 + 2.0		27 + 1.2	
28 + 0		78 + 1.2		28 + .1		78 + 2.1		28 + 3.9	
29 + 0		79 + 1.5		29 + 0		79 + 2.0		29 + 6.4	
30 + 0		80 + 1.7		30 + .1		80 + 2.0		30 + .2	
31 + 0		81 + 1.7		31 + 0		81 + 2.1			
32 + 0		82 + 1.7		32 + 0		82 + 2.1			
33 + 0		83 + 1.9		33 + .1		83 + 2.1		Seq. 5	
34 + 0		84 + .1		34 + .1		84 + 2.1			
35 + 0		85 + 7		35 + 0		85 + 2.1			
36 + 0		86 + 1.0		36 + 0		86 + 1.4			
37 + 0		87 + 1 3		37 + 0		87 + 2.1			
38 + 0		88 + 1.4		38 + .1		88 + 2.0			
39 + 0		89 + 1.5		39 + 0		89 + 1.9			
40 + 0		90 - .5		40 + 0		90 + 1.8			
41 + 0		91 + .6		41 + 0		91 + 1.8			
42 + 0		92 + 1		42 + 0		92 + 2.1			
43 + 0		93 - .7		43 + 0		93 + 1.4			
44 + 0		94 + .7		44 + 0		94 + 1.2			
45 + 0		95 + .7		45 + 0		95 + 1.2			
46 + 0		96 + .7		46 + 0		96 + .4			
47 + 0		97 + .7		47 + 0		97 + .8			
48 + 0		98 + .1		48 + 0		98 + 1.0			
49 + 0		99 + .1		49 + 0		99 + 1.2			
50 + 0		100 + .1		50 + 0		100 + .1			

1851 .05 0° .15 0 10.0 -2.5° 1.010 2027.5 .002251

a)

#		val	#		val
1	-	.1	51	·	.2
2	-	.1	52	·	.7
3	-	.1	53	·	.1
4	-	.1	54	·	1.0
5		.1	55	·	2.2
6	-	.1	56	·	2.4
7	-	.1	57	·	1.9
8	-	.1	58	·	1.8
9	-	.1	59	·	1.5
10	-	.1	60	·	1.5
11	-	.1	61	·	1.6
12	-	.1	62	·	1.6
13	-	.1	63	·	1.7
14	-	.1	64	·	1.8
15	-	.1	65	·	1.8
16	-	.1	66	·	1.8
17	-	.1	67	·	1.8
18	-	.1	68	·	1.8
19	-	.1	69	·	1.8
20	-	.1	70	·	1.4
21	-	.1	71	·	1.4
22	-	.1	72	·	1.3
23	-	.1	73	·	1.3
24	-	.1	74	·	.9
25	-	.1	75	·	.7
26	-	1	76	·	.7
27	-	1	77	·	.9
28	-	.1	78	·	1.4
29	-	.1	79	·	1.6
30	-	.1	80	·	1.7
31	-	.1	81	·	1 7
32	-	.1	82	·	1.8
33	-	.1	83	·	1.8
34	-	.1	84	-	.1
35	-	.1	85	·	.7
36	-	1	86	·	.9
37	-	.1	87	·	1.1
38	-	.1	88	·	1.3
39	-	.1	89	·	1.3
40	-	.1	90	·	1.1
41	-	.1	91	·	1.0
42	-	.1	92	·	.1
43	-	.1	93	·	.5
44	-	.1	94	·	
45	-	.1	95	·	.5
46	-	1	96	·	.6
47	-	.1	97	-	5
48	-	.1	98	+	.1
49	-	.1	99	·	.1
50	-	.1	100	+	.1

b)

#		val	#		val
1	+	0	51	+	.1
2	+	0	52	+	1.1
3	+	0	53	·	.1
4	+	0	54	·	1.9
5	·	0	55	+	2.1
6	·	0	56	·	.9
7	·	0	57	·	2.2
8	+	0	58	·	4.7
9	·	0	59	·	2.6
10	·	0	60		1.4
11	·	0	61	·	.8
12	·	0	62	·	2.0
13	+	0	63	·	2.5
14	·	0	64	·	1.1
15	·	0	65	+	1.8
16	+	0	66	·	3.3
17	·	0	67	·	3.5
18	+	0	68	·	2.7
19	·	0	69	·	1.3
20	+	0	70	·	.5
21	·	0	71	·	.9
22	·	0	72	·	1.0
23	-	.9	73	·	1.0
24	·	0	74	·	.8
25	·	0	75	·	.8
26	·	0	76	·	.8
27	·	0	77	·	1.2
28	·	0	78	·	1.5
29	·	0	79	·	2.0
30	·	0	80	·	1.7
31	·	0	81	-	1.8
32	·	0	82	·	1.8
33	·	0	83	·	1.0
34	·	0	84	·	1 8
35	·	0	85	·	1.9
36	·	0	86	·	1.9
37	·	0	87	+	4.5
38	·	0	88	·	1.5
39	·	0	89	·	.8
40	·	0	90	+	1.3
41	+	0	91	·	1.4
42	+	0	92	-	3.9
43	+	0	93	·	1.0
44	·	0	94	+	.7
45	+	0	95	·	.8
46	+	0	96	·	1.1
47	+	0	97	·	1.3
48	·	0	98	·	1.1
49	·	0	99	·	1.8
50	+	.1	100	-	.1

c)

#		val
1	·	.1
2	+	.2
3	-	.8
4	-	.8
5	-	.8
6	·	.9
7	·	1.0
8	·	1.0
9	·	4.4
10	·	.5
11	-	1.6
12	-	2.7
13	-	2.8
14	-	1.7
15	·	.0
16	·	.2
17	·	1.4
18	·	7.2
19	·	6.9
20	·	.1
21	-	3.5
22	-	5.4
23	-	4.8
24	-	3.6
25	·	.4
26	-	2.0
27	-	1.5
28	·	3.7
29	·	.5
30	·	.1

Seq. 5

1052   .05   0°   .15   0   10.0   -5.0°   1.010   2027.5   .002251

a)

1	-	.1		51	+	.1
2	-	.1		52	+	1.3
3	-	.1		53	-	.1
4	-	.1		54	+	2.2
5	-	.1		55	+	1.0
6	-	.1		56	+	1.8
7	-	.1		57	+	.9
8	-	.1		58	+	.9
9	-	.1		59	+	.1
10	-	.1		60	+	1.0
11	-	.1		61	+	1.5
12	-	.1		62	+	1.5
13	-	.1		63	+	1.5
14	-	.1		64	+	1.6
15	+	0		65	+	1.6
16	-	.1		66	+	1.2
17	-	1		67	-	1.0
18	-	.1		68	+	1.4
19	-	.1		69	+	1.6
20	-	.1		70	-	.2
21	-	.1		71	+	.3
22	-	.1		72	+	.3
23	-	.1		73	+	1.0
24	-	.1		74	+	1.2
25	-	.1		75	+	.5
26	-	.1		76	+	.3
27	-	1		77	+	1.3
28	-	.1		78	+	2.0
29	-	.1		79	+	2.1
30	-	.1		80	+	2.1
31	-	.1		81	+	2.1
32	-	.1		82	+	2.2
33	-	.1		83	+	1.4
34	-	.1		84	+	.1
35	-	1		85	+	1.2
36	-	.1		86	+	1.3
37	-	.1		87	+	1.7
38	-	.1		88	+	1.7
39	-	1		89	+	.3
40	-	.1		90	+	.5
41	-	.1		91	+	.7
42	-	.1		92	+	.1
43	-	.1		93	+	1.3
44	-	1		94	+	.8
45	-	.1		95	+	.8
46	-	.1		96	+	.8
47	-	.1		97	+	.5
48	-	.1		98	+	.1
49	-	.1		99	+	.1
50	-	1		100	+	.1

b)

1	+	.2		51	+	.2
2	+	.2		52	+	1.3
3	+	.2		53	+	.3
4	+	.2		54	+	1.9
5	+	.2		55	+	1.9
6	+	.2		56	+	.5
7	+	.2		57	-	.2
8	+	.2		58	+	3.9
9	+	.2		59	+	5.3
10	+	.2		60	+	2.9
11	+	.2		61	+	.5
12	+	.2		62	+	1.4
13	+	.2		63	+	1.9
14	+	.2		64	+	.8
15	+	.2		65	+	1.2
16	+	.2		66	+	3.1
17	+	.2		67	+	3.2
18	+	.2		68	+	2.9
19	+	.2		69	+	1.3
20	+	.2		70	+	.1
21	+	.2		71	+	.4
22	+	.2		72	+	.3
23	+	.2		73	+	.5
24	+	1.1		74	+	.6
25	+	0		75	+	.5
26	+	0		76	+	.2
27	+	0		77	+	.5
28	+	0		78	+	1.0
29	+	0		79	+	1.6
30	+	0		80	+	1.7
31	+	0		81	+	1.7
32	+	0		82	+	1.7
33	+	0		83	+	1.5
34	+	0		84	+	1.5
35	+	0		85	+	1.9
36	+	0		86	+	1.9
37	+	0		87	+	4.2
38	+	.2		88	+	.7
39	+	0		89	+	1.5
40	+	0		90	+	.7
41	+	0		91	+	1.3
42	+	0		92	+	4.5
43	+	0		93	+	.9
44	+	0		94	+	.1
45	+	0		95	+	.3
46	+	0		96	+	.8
47	+	0		97	+	.5
48	+	0		98	+	8
49	+	0		99	+	1.3
50	+	0		100	+	.1

c)

1	+	.1
2	+	.1
3	-	1.8
4	-	1.7
5	-	1.6
6	-	1.4
7	+	.2
8	+	.4
9	+	1.9
10	+	3.9
11	-	2.1
12	-	4.1
13	-	3.9
14	-	3.1
15	+	.2
16	-	2.2
17	+	.9
18	+	5.7
19	+	8.5
20	+	.1
21	-	5.4
22	-	7.6
23	-	6.9
24	-	5.0
25	-	1.2
26	-	4.0
27	+	.1
28	+	3.4
29	+	6.0
30	+	.1

Seq. 5

```
 .u8   .05    0°    .15    0   10.0   -5.0°   1.048   2032.   .002194
```

a)				b)				c)	
1 - .1		51 · .1		1 · 0		51 · .1		1 · .1	
2 - .1		52 - 1.6		2 · 0		52 · 1.5		2 -16.5	
3 - .1		53 · .1		3 · 0		53 · .1		3 -24.5	
4 - 1.4		54 · 10.2		4 · .1		54 · 4.5		4 -19.5	
5 · 0		55 - 7.0		5 · .3		55 · 4.4		5 -11.2	
6 · 0		56 - 6.0		6 · .3		56 · 1.9		6 · 5.0	
7 · 0		57 - 6.2		7 · .4		57 · 2.4		7 · 0.0	
8 · 0		58 · 7.0		8 · .5		58 · 4.0		8 · 32.5	
9 · 0		59 · 3.8		9 · .6		59 · 3.8		9 · 37.3	
10 · 3 4		60 · 4.0		10 · 1.5		60 · 3.9		10 · 38.5	
11 - .1		61 · 6.4		11 · 4.5		61 · 4.3		11 - 5.7	
12 - .1		62 · 5.2		12 · 0		62 · 5.8		12 -10.4	
13 - .1		63 · 3.9		13 · .4		63 · 6.3		13 -10.8	
14 - .1		64 · 5.5		14 · .1		64 · 2.0		14 - 8.5	
15 - .1		65 · 5.8		15 · .2		65 · 5.0		15 · 4.1	
16 - .1		66 · 3.0		16 · .3		66 · 11.3		16 - 5.7	
17 - .1		67 · 2.6		17 · .3		67 · 14.5		17 · 4.5	
18 - 1		68 · 6.0		18 · .3		68 · 13.7		18 · 24.0	
19 - .1		69 · 7.3		19 · .4		69 · 6.6		19 · 36.1	
20 - .1		70 · 1.3		20 · .4		70 · 1.8		20 · .2	
21 - .1		71 · 1.0		21 · .4		71 · 2.1		21 · .1	
22 - .1		72 · 4.5		22 · .4		72 · 2.5		22 - .5	
23 - .1		73 · 7.2		23 · .4		73 · 4.1		23 - 2.4	
24 - .1		74 · .2		24 · .6		74 · ..		24 - 6.2	
25 - .1		75 · .1		25 · .7		75 · ..		25 · 1.0	
26 - .1		76 · 5.1		26 · .6		76 · .5		26 · .1	
27 - .1		77 · 7.5		27 · .6		77 · 8.5		27 · .1	
28 - .1		78 · .5		28 · .6		78 · 22.7		28 · 5.5	
29 - .1		79 · 1.7		29 · .6		79 · 23.7		29 · 15.0	
30 - .1		80 · 7.2		30 · .6		80 · 10.4		30 · .2	
31 - .1		81 · ..		31 · .5		81 · 3.4			
32 - .1		82 · ..		32 · .4		82 · 4.1		Sep. 5	
33 - .1		83 · 1..		33 · .4		83 · 4.5			
34 - .1		84 · 1.5		34 · .4		84 · 6.5			
35 - .1		85 · 1.5		35 - .4		85 - 7.3			
36 - .1		86 · 4.4		36 · 0		86 · 7.5			
37 - .1		87 · 7.0		37 · .1		87 · 2.6			
38 - .1		88 · .5		38 · .2		88 - 4.9			
39 - .1		89 · 17.3		39 · .2		89 · 2.8			
40 - .1		90 · 9.0		40 · 0		90 · 5.8			
41 - .1		91 · 1.3		41 · 0		91 · 6.9			
42 - .1		92 · .1		42 · 0		92 · 7.1			
43 - .1		93 · 6.9		43 · 0		93 · 2.2			
44 - .1		94 - 5.1		44 · 0		94 · 3.7			
45 - .1		95 · 6.1		45 - 0		95 · 5.4			
46 - .1		96 · 7.0		46 · 0		96 - 6.3			
47 - .1		97 · 4 2		47 · 0		97 · 6 0			
48 - .1		98 - .1		48 · 0		98 · 6.1			
49 - 1		99 - .1		49 · 0		99 - 7.1			
50 - 1		100 · .1		50 · 0		100 · .1			

1869 .05 0° .15 0 10.0 +2.5° 1.049 2032.6 .002194

a)				b)				c)	
1 - .1	51 + .1			1 + 0	51 + .1			1 + .2	
2 - .1	52 + .8			2 + 0	52 + 1.0			2 -11.7	
3 - .1	53 + .1			3 + 0	53 + .1			3 -19.6	
4 - .1	54 + 9.5			4 + 0	54 + 5.1			4 -17.1	
5 - .1	55 + 7.2			5 + 0	55 + 5.6			5 - 8.8	
6 - .1	56 + 5.8			6 + 0	56 + 2.8			6 + 5.8	
7 - .1	57 + 5.9			7 + 0	57 + 4.0			7 + .1	
8 - .1	58 + 6.5			8 + 0	58 + 5.6			8 +19.6	
9 + 0	59 + 4.5			9 + .3	59 + 5.7			9 +33.2	
10 + 1.8	60 + 5.3			10 + .5	60 + 5.7			10 +39.3	
11 - .1	61 + 6.2			11 + 6.8	61 + 5.7			11 - 5.5	
12 - .1	62 + 6.3			12 + 0	62 + 6.1			12 -10.1	
13 - .1	63 + 6.1			13 + 0	63 + 6.7			13 -11.6	
14 + 0	64 + 6.1			14 + 7.3	64 + 2.9			14 - 8.6	
15 + 0	65 + 6.6			15 + .1	65 + 6 1			15 + 4.5	
16 + .1	66 + 4.5			16 + 0	66 +10.6			16 - 5.7	
17 + .1	67 + 4.7			17 + 0	67 +11.0			17 + 5.1	
18 + .1	68 + 6.5			18 + 0	68 + 9 3			18 +25.5	
19 + .1	69 + 6.9			19 + 0	69 + 5.8			19 +39.6	
20 + .1	70 + 3.0			20 + 0	70 + 3.5			20 + .2	
21 + .1	71 + 3.4			21 + 0	71 + 4.0			21 - .7	
22 + .1	72 + 5.0			22 + 0	72 + 4.2			22 - 3.8	
23 + .1	73 + 6.7			23 + 0	73 + 5.0			23 - 4 8	
24 + ..1	74 + 2.3			24 + 2.6	74 + .2			24 - 3.7	
25 + 0	75 + 2.5			25 + 0	75 + .7			25 + .7	
26 + 0	76 + 5.1			26 + 0	76 + 5.9			26 - 1.9	
27 + 0	77 + 7.4			27 + 0	77 +17.0			27 + .2	
28 + 0	78 + 4.8			28 + 0	78 +17.3			28 + 8.3	
29 + 0	79 + 5.0			29 + 0	79 +11.9			29 +24.2	
30 + 0	80 + 7.2			30 + 0	80 + 6.1			30 + .1	
31 + 0	81 + 7.9			31 + 0	81 + 5.7				
32 + 0	82 + 8.1			32 + 0	82 + 5.9			Seq. 5	
33 + 0	83 +15.9			33 + 0	83 + 6.2				
34 + 0	84 - 1.4			34 + 0	84 + 6.3				
35 + 0	85 + 4.2			35 + 0	85 + 6.8				
36 + 0	86 + 5.7			36 + 0	86 + 7.0				
37 + 0	87 + 6.8			37 + 0	87 + 5.8				
38 + .1	88 + .8			38 + 0	88 + 5.8				
39 + 0	89 + 4.7			39 + 0	89 + 4.7				
40 + 0	90 + 3.8			40 + 0	90 + 5.7				
41 + 0	91 + .1			41 + 0	91 + 6.4				
42 + 0	92 - 7.0			42 + 0	92 + 7.9				
43 + 0	93 - 6.0			43 + 0	93 + 3.8				
44 + .1	94 + 6.4			44 + 0	94 + 4.4				
45 + .1	95 + 6.6			45 + 0	95 + 5.2				
46 - .1	96 + 3.8			46 + 0	96 + 5.9				
47 - .1	97 + .1			47 + 0	97 + 5.9				
48 - .1	98 + 1			48 + 0	98 + 6.1				
49 - .1	99 + .1			49 + 0	99 + 6.6				
50 - .1	100 + .1			50 + 0	100 + .1				

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a)				b)				c)	
1	- .1	51	+ .1	1	+ 0	51	+ .2	1	+ .1
2	- .1	52	+ .4	2	+ 0	52	+ .7	2	- 4.4
3	- .1	53	+ .1	3	+ 0	53	+ .2	3	-10.3
4	- .1	54	+ 7.8	4	+ 0	54	+ 5.9	4	- 9.6
5	+ 0	55	+ 7.9	5	+ 0	55	+ 9.0	5	- 4.2
6	+ 0	56	+ 7.6	6	+ 0	56	+ 7.3	6	+ 7.2
7	+ 0	57	+ 6.1	7	+ 0	57	+ 9.1	7	- 1.8
8	+ 0	58	+ 6.3	8	+ 0	58	+ 9.0	8	+10.5
9	+ 0	59	+ 6.0	9	+ 0	59	+ 6.4	9	+27.8
10	+ 1.4	60	+ 6.2	10	+ 0	60	+ 6.1	10	+38.8
11	+ .1	61	+ 6.7	11	+ 5.6	61	+ 6.2	11	- 4.3
12	+ .1	62	+ 6.8	12	+ 0	62	+ 7.2	12	- 8.5
13	+ .1	63	+ 6.8	13	+ 0	63	+ 7.8	13	- 9.9
14	+ .1	64	+ 7.1	14	+ 5.5	64	+ 4.1	14	- 6.2
15	+ .1	65	+ 7.2	15	+ 0	65	+ 8.2	15	+ 5.7
16	+ 0	66	+ 6.6	16	+ 0	66	+12.2	16	- 3.5
17	+ 0	67	+ 6.6	17	+ 0	67	+11.8	17	+ 9.7
18	+ 0	68	+ 7.2	18	+ 0	68	+ 8.4	18	+29.7
19	+ 0	69	+ 7.3	19	+ 0	69	+ 6.1	19	+42.9
20	+ 0	70	+ 4.6	20	+ 0	70	+ 5.0	20	+ .2
21	+ 0	71	+ 5.2	21	+ 0	71	+ 5.7	21	- 4.7
22	+ 0	72	- 6.1	22	+ 0	72	+ 5.9	22	-10.0
23	+ .1	73	+ 6.4	23	+ 0	73	+ 6.2	23	-10.0
24	+ .1	74	+ 5.7	24	+ 5.9	74	+ 3.0	24	- 5.2
25	+ .1	75	+ 5.3	25	+ 0	75	+ 6.7	25	+ 5.8
26	+ .1	76	+ 5.6	26	+ 0	76	+10.4	26	- 4.2
27	+ .1	77	+ 6.7	27	+ 0	77	+10.5	27	+ 6.6
28	+ .1	78	+ 6.9	28	+ 0	78	+ 7.9	28	+18.9
29	+ 1	79	+ 6.9	29	+ 0	79	+ 6.8	29	+32.7
30	+ .2	80	+ 7.1	30	+ 0	80	+ 6.8	30	+ .2
31	+ .2	81	+ 7.3	31	+ 0	81	+ 6.9		
32	+ .2	82	+ 7.5	32	+ 0	82	+ 7.2		
33	+ .2	83	+ 9.7	33	+ 0	83	+ 7.4		
34	+ .2	84	+ 1.4	34	+ 0	84	+ 7.4		
35	+ .2	85	+ 5.8	35	+ 0	85	+ 7.5		
36	+ .2	86	+ 6.4	36	+ 0	86	+ 7.6		
37	+ .2	87	+ 6.9	37	+ 0	87	+10.6		
38	+ .2	88	+ 5.0	38	+ 0	88	+ 6.5		
39	+ .2	89	+ 9.8	39	+ 0	89	+ 5.7		
40	+ .2	90	+ 4.9	40	+ 0	90	+ 6.5		
41	+ .2	91	+ 5.5	41	+ 0	91	+ 7.0		
42	+ .2	92	+ .1	42	+ 0	92	+10.8		
43	+ .2	93	+ 6.5	43	+ 0	93	+ 5.9		
44	+ .2	94	+ 6.4	44	+ 0	94	+ 5.9		
45	+ .2	95	+ 6.3	45	+ 0	95	+ 6.2		
46	+ .1	96	+ 6.3	46	+ 0	96	+ 6.5		
47	+ .1	97	+ 3.4	47	+ 0	97	+ 6.7		
48	+ .1	98	+ .1	48	+ 0	98	+ 6.9		
49	+ .1	99	+ .1	49	+ 0	99	+ 7.1		
50	+ .1	100	+ .1	50	+ 0	100	+ .1		

Seq. 5

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a)

#		val	#		val
1	+	.1	51	+	.2
2	+	.1	52	+	1.1
3	+	.1	53	+	.4
4	+	.1	54	+	5.3
5	+	.1	55	+	6.5
6	+	.1	56	+	8.0
7	+	.1	57	+	8.2
8	+	.3	58	+	4.8
9	+	.5	59	+	4.7
10	+	1.5	60	+	6.6
11	+	0	61	+	8.1
12	+	0	62	+	5.2
13	+	0	63	+	5.6
14	+	.1	64	+	7.2
15	+	.3	65	+	8.1
16	+	.2	66	-	5.9
17	+	.4	67	-	5.7
18	+	0	68	+	7.0
19	+	.1	69	+	7.7
20	+	.2	70	+	5.2
21	+	.1	71	+	5.3
22	+	.4	72	+	6.0
23	+	.5	73	-	7.0
24	+	.5	74	+	6.9
25	+	0	75	+	5.8
26	+	.1	76	+	5.9
27	+	.1	77	-	7.3
28	+	.1	78	+	8.5
29	+	.2	79	+	8.0
30	+	.1	80	+	7.9
31	+	.2	81	+	7.9
32	+	0	82	+	8.6
33	+	0	83	+	8.7
34	+	0	84	+	1.8
35	+	0	85	+	6.1
36	+	.1	86	+	6.5
37	+	0	87	+	7.6
38	+	.1	88	+	7.8
39	+	0	89	+	6.8
40	+	0	90	+	4.2
41	+	0	91	+	5.4
42	+	0	92	+	.1
43	+	.2	93	+	7.2
44	+	0	94	+	6.5
45	+	.1	95	+	6.7
46	+	0	96	+	6.9
47	+	0	97	+	4.5
48	+	0	98	+	.1
49	+	0	99	+	.1
50	+	0	100	+	.1

b)

#		val	#		val
1	+	0	51	+	.1
2	+	0	52	+	.5
3	+	0	53	+	.1
4	+	0	54	+	1.8
5	+	0	55	+	3.3
6	+	0	56	+	3.2
7	+	0	57	+	12.3
8	+	0	58	+	18.5
9	+	0	59	+	12.7
10	+	0	60	+	6.9
11	+	1.4	61	+	4.3
12	+	0	62	+	5.7
13	+	.2	63	+	6.4
14	+	2.7	64	+	3.2
15	+	.2	65	+	7.6
16	+	0	66	+	14.0
17	+	0	67	-	13.6
18	+	.1	68	+	8.5
19	+	.1	69	+	4.9
20	+	.1	70	+	3.4
21	+	.1	71	+	3.6
22	+	.1	72	+	3.6
23	+	.1	73	+	4.6
24	+	7.1	74	+	3.8
25	+	.1	75	+	3.9
26	+	.3	76	+	4.2
27	+	.4	77	+	4.8
28	+	.4	78	+	5.5
29	+	.4	79	+	5.6
30	+	.4	80	+	6.6
31	+	.1	81	+	6.1
32	+	0	82	+	6.1
33	+	.2	83	+	6.1
34	+	.2	84	+	6.6
35	+	.2	85	+	7.4
36	+	.2	86	+	7.6
37	+	.3	87	+	20.9
38	+	.9	88	+	5.1
39	+	1.5	89	+	4.8
40	+	0	90	+	6.0
41	+	0	91	+	7.2
42	+	0	92	+	18.9
43	+	0	93	+	4.8
44	+	0	94	+	4.5
45	+	0	95	+	5.5
46	+	0	96	+	6.3
47	+	0	97	+	5.8
48	+	0	98	+	6.3
49	+	0	99	+	6.9
50	+	0	100	+	.1

c)

#		val
1	+	.1
2	+	.3
3	-	2.7
4	-	3.7
5	-	1.9
6	+	3.3
7	-	.8
8	+	1.6
9	+	15.7
10	+	31.1
11	-	8.2
12	-	13.5
13	-	15.0
14	-	9.2
15	+	4.7
16	-	5.4
17	+	11.2
18	+	32.2
19	+	44.2
20	+	.1
21	-	11.9
22	-	20.0
23	-	17.1
24	-	9.3
25	+	6.0
26	-	2.5
27	+	15.7
28	+	23.7
29	+	33.9
30	-	.1

Seq. 5

1872 .05 0° .15 0 10.0 -5.0° 1 048 2032.6 .002194

a)				b)				c)	
1	+ 0	51	+ .2	1	+ 0	51	+ .1	1	+ .1
2	+ .2	52	+ 1.4	2	· 2	52	· .5	2	· 1.3
3	+ .2	53	+ .5	3	· .2	53	+ .1	3	- .8
4	+ .2	54	+ 1.9	4	· .2	54	+ 1.4	4	- 2.0
5	+ .2	55	+ 3.4	5	+ .2	55	+ 1.0	5	- 1.3
6	+ .2	56	+ 7.9	6	· .2	56	· .4	6	+ 1.3
7	+ .2	57	· 8.1	7	+ .2	57	· 1.7	7	+ .3
8	+ .3	58	· 2.3	8	· .2	58	-19.2	8	+ 1.0
9	+ .3	59	· 1.0	9	· .2	59	+26.2	9	· 9.7
10	+ 1.0	60	· 6.2	10	+ .2	60	+16.5	10	+22.4
11	+ 0	61	+ 8.3	11	· .2	61	· 3.2	11	-10.8
12	+ 0	62	· 2.6	12	· .1	62	+ 3.3	12	-16.0
13	+ 0	63	· 2 8	13	+ .2	63	+ 4.1	13	-17.4
14	+ 0	64	· 6.7	14	· 1.0	64	· 2.3	14	-11.2
15	+ .1	65	· 8.1	15	· .2	65	· 5.7	15	+ .6
16	+ .1	66	· 3.7	16	+ 0	66	+12.5	16	- 8.8
17	+ .2	67	+ 3.4	17	· 0	67	·13.8	17	+ 6.7
18	+ .2	68	· 6.3	18	· .2	68	+ 9.6	18	+30.3
19	· .2	69	· 7.8	19	· 3	69	+ 4.5	19	+45.7
20	+ .2	70	· 3.7	20	+ 0	70	· 1.0	20	+ .1
21	+ .2	71	· 3.6	21	· .1	71	· 1.3	21	-19.0
22	+ .2	72	· 5.0	22	+ 1	72	· 1.6	22	-26.7
23	+ .3	73	· 6.5	23	· .2	73	· 3.5	23	-21.7
24	+ .4	74	· 6.8	24	· 7.3	74	· 2.3	24	-12.6
25	+ .4	75	· 3.7	25	· .3	75	+ 2.3	25	· 4 7
26	+ .4	76	· 4 7	26	· .3	76	· 2.3	26	+ 2.1
27	+ .4	77	· 7.1	27	· 5	77	· 2.3	27	+27.2
28	+ .4	78	· 8.8	28	· .5	78	· 3.5	28	+26.5
29	+ .4	79	· 5.9	29	· 5	79	· 4.0	29	+34.3
30	+ .4	80	· 6.2	30	+ 1.7	80	· 4.2	30	+ .1
31	+ 4	81	· 7.0	31	· .1	81	· 4.7		
32	- .4	82	· 6.5	32	· .2	82	· 5 3		Seq. 5
33	+ .1	83	· 5 5	33	· .2	83	+ 5.5		
34	+ .1	84	· .9	34	· 4	84	· 5.8		
35	+ .2	85	· 4 5	35	+ .4	85	· 7.1		
36	+ .2	86	· 5.8	36	· .5	86	+ 7.4		
37	+ .2	87	· 7 6	37	+ .9	87	+21.6		
38	+ .3	88	· 7.5	38	· 1.4	88	· 2.1		
39	+ 1	89	· 2 1	39	+ 1.8	89	+ 7.4		
40	+ .1	90	· 2.7	40	· 0	90	· 5.3		
41	+ .1	91	· 4.7	41	· 0	91	· 6.7		
42	+ .1	92	· .1	42	· 0	92	+23.0		
43	+ 1	93	· 7.2	43	· 0	93	· 5.5		
44	+ .1	94	· 5 8	44	· 0	94	· 1.7		
45	+ .2	95	· 6.2	45	· 0	95	+ 4.5		
46	+ 0	96	· 6.8	46	+ 0	96	+ 6.2		
47	+ 0	97	· 4.9	47	· 0	97	+ 5.4		
48	+ 0	98	· .1	48	· 0	98	+ 5.9		
49	+ 0	99	· .1	49	· 0	99	+ 6.9		
50	+ 0	100	· .1	50	+ 0	100	· .1		

1903 .05   0°   .10   0   10.0   +5.0°   1.010   2030.4   .002225

a)				b)				c)	
1 + 0	51 - .1			1 · 0	51 · .1			1 · .1	
2 + 0	52 - 1.6			2 · 0	52 · .6			2 - 3.8	
3 · 0	53 · .0			3 · 0	53 · .2			3 - 5.3	
4 + 0	54 - 5.1			4 · 0	54 · 3.2			4 - 4.3	
5 + 0	55 · 4.1			5 · 0	55 · 3.7			· - 3.4	
6 + 0	56 · 2.9			6 · 0	56 · 1.6			· + .3	
7 · 0	57 · 1.8			7 · 0	57 · .9			· · .1	
8 + 0	58 · 3.5			8 · 0	58 · 2.7			· · 2.9	
9 + 0	59 · 2.3			9 · 0	59 · 1.9			9 · 7.0	
10 · 5.2	60 · 2.5			10 · 0	60 · 1.3			10 · 8.7	
11 · 0	61 · 2.4			11 · .3	61 · 1.6			11 · .1	
12 + 0	62 · 3.0			12 · .1	62 · 2.9			12 - .7	
13 · 0	63 · 3.1			13 · 0	63 · 3.1			13 - .6	
14 · 0	64 · 3.1			14 · .7	64 · 1.0			14 + .2	
15 · 0	65 · 2.3			15 · 0	65 · 1.4			15 + .2	
16 · 0	66 · 2.0			16 · 0	66 · 3.5			16 + .4	
17 · 0	67 · 2.2			17 · 0	67 · 4.3			17 · 1.4	
18 · 0	68 · 3.0			18 · 0	68 · 2.1			18 · 5.0	
19 · 0	69 · 2.5			19 · 0	69 · 1.7			19 · 7.0	
20 · 0	70 · 1.0			20 · 0	70 · .4			20 · .1	
21 + 0	71 · 1.5			21 · 0	71 · .6			21 · .1	
22 + 0	72 · 1.8			22 · 0	72 · .9			22 - 2.0	
23 + 0	73 · 2.1			23 · 0	73 · 1.2			23 - 1.9	
24 · 0	74 - 1.0			24 · 0	74 · .1			24 - 1.7	
25 · 0	75 · 1.5			25 · 0	75 - .7			25 · .5	
26 · 0	76 · 2.0			26 · 0	76 - .5			26 · .5	
27 · 0	77 · 2.5			27 · 0	77 · 1.3			27 · .5	
28 · 0	78 · 1.7			28 · 0	78 · .3			28 + .6	
29 · 0	79 · 3.0			29 · 0	79 · 5.1			29 · 2.5	
39 · 0	70 · 3.1			30 · 0	80 · 2.1			30 · .1	
31 · 0	81 · 3.1			31 · 0	81 · 1.9				
32 · 0	82 · 3.1			32 · 0	82 · 2.3			Seq. 5	
33 + 0	83 · 5.9			33 · 0	83 · 2.0				
34 + 0	84 · 1.0			34 · 0	84 · 1.8				
35 + 0	85 · 2.3			35 · 0	85 · 2.1				
36 + 0	86 · 2.4			36 · 0	86 · 1.9				
37 · 0	87 · 3.1			37 · 0	87 · 1.6				
38 + 0	88 · .9			38 · 0	88 · 1.9				
39 + 0	89 · 4.1			39 · 0	89 · 1.4				
40 · 0	90 · 2.0			40 · 0	90 · 1.5				
41 + 0	91 · 1.8			41 · 0	91 · 1.6				
42 + 0	92 · .5			42 + 0	92 · 1.7				
43 + 0	93 · 2.2			43 · 0	93 · .9				
44 + 0	94 · 1.9			44 + 0	94 · 1.0				
45 · 0	95 · 1.7			45 + 0	95 · 1.0				
46 + 0	96 · 1.8			46 · 0	96 · 1.3				
47 · 0	97 · 1.0			47 + 0	97 · 1.4				
48 + 0	98 · .3			48 · 0	98 · 1.6				
49 + 0	99 · .4			49 · 0	99 · 1.8				
50 + 0	100 · .2			50 · 0	100 · .1				

1904 .05 0° .10 0 10.0 +2.5° 1.010 2032.6 .002225

a)				b)				c)	
1 + 0	51 + .1			1 + .1	51 - .1			1 + .1	
2 + 0	52 + .9			2 + 0	52 + 1.4			2 + .1	
3 + 0	53 + .1			3 + 0	53 + .1			3 - 3.2	
4 + 0	54 + 4.4			4 + 0	54 + 2.9			4 - 2.6	
5 + 0	55 + 4.0			5 + 0	55 + 3.1			5 + .2	
6 + 0	56 + 2.5			6 + 0	56 - 1.4			6 + 1.3	
7 + 0	57 + 1.3			7 + 0	57 + 1.5			7 + 1.3	
8 + 0	58 + 2.6			8 + 0	58 + 2.5			8 + 3.2	
9 + 0	59 + 1.8			9 + 0	59 + 2.0			9 + 7.8	
10 + 1.7	60 + 1.8			10 + 1.0	60 + 2.0			10 +10.4	
11 + 0	61 + 1.9			11 - .1	61 + 2.0			11 + .7	
12 + 0	62 + 2.7			12 - .1	62 + 2.8			12 + .1	
13 + 0	63 + 2.8			13 + 1.1	63 + 3.0			13 + .1	
14 + 0	64 + 2.9			14 - .1	64 + .8			14 + .1	
15 + 0	65 + 2.5			15 - 1	65 + 1.3			15 + 1.1	
16 + 0	66 + 2.4			16 - 1	66 + 3.2			16 + 1.3	
17 + 0	67 + 2.4			17 - .1	67 + 3.3			17 + 2.1	
18 + 0	68 + 2.6			18 - .1	68 + 3.0			18 + 6.7	
19 + 0	69 + 2.0			19 - .1	69 + 1.9			19 + 9.5	
20 + 0	70 + .7			20 - 1	70 + .9			20 + .9	
21 + 0	71 + 1.4			21 - .1	71 + 1.3			21 + .3	
22 + 0	72 + 1.6			22 - .1	72 + 1.4			22 + .1	
23 + 0	73 + 1.6			23 - .1	73 + 1.5			23 + .1	
24 + 0	74 + 1.0			24 - .1	74 + .1			24 + .1	
25 + 0	75 + 1.1			25 - .1	75 + .1			25 + .3	
26 + 0	76 + 1.5			26 - .1	76 + .3			26 + .4	
27 + 0	77 + 2.0			27 - .1	77 + 4.4			27 + .5	
28 + 0	78 + 2.1			28 - .1	78 + 4.3			28 + 1.6	
29 + 0	79 + 2.5			29 - .1	79 + 3.6			29 + 4.4	
30 + 0	80 + 2.6			30 - .1	80 + 2.1			30 + .1	
31 + 0	81 + 2.6			31 - .1	81 + 2.3				
32 + 0	82 + 2.6			32 - .1	82 + 2.5			Seq. 5	
33 + 0	83 + 4.6			33 - .1	83 + 2.6				
34 + 0	84 + .7			34 - .1	84 + 2.1				
35 + 0	85 + 1.8			35 - .1	85 + 2.2				
36 + 0	86 + 2.0			36 - .1	86 + 2.3				
37 + 0	87 + 2.4			37 - .1	87 + 2.3				
38 + 0	88 + .3			38 - .1	88 + 2.3				
39 + 0	89 + 4.5			39 - .1	89 + 2.3				
40 + 0	90 + 1.5			40 - .1	90 + 1.7				
41 + 0	91 + 1.6			41 - .1	91 + 1.8				
42 + 0	92 + .1			42 - 1	92 + 2.2				
43 + 0	93 + 1.8			43 - .1	93 + 1.4				
44 + 0	94 + 1.6			44 - 1	94 + 1.2				
45 + 0	95 + 1.6			45 - .1	95 - 1.4				
46 + 0	96 + 1.3			46 - 1	96 + 1.5				
47 + 0	97 + 1.1			47 - .1	97 + 1.6				
48 + 0	98 + .1			48 - .1	98 + 1.7				
49 + 0	99 + .1			49 - .1	99 + 2.0				
50 + 0	100 + .1			50 - 1	100 + .1				

1905 .05 0° .10 0 10.0 0° 1.010 2032.6 .002225

a)				b)				c)	
1 + 0	51 + .2			1 + .1	51 + .1			1 + .1	
2 + 0	52 + 1.2			2 + .1	52 + 1.0			2 + .1	
3 + 0	53 + .1			3 + .1	53 + .1			3 - 2.1	
4 + 0	54 + 4.0			4 + .1	54 + 2.7			4 - 1.9	
5 + 0	55 + 3.8			5 + .1	55 + 3.7			5 + .7	
6 + 0	56 + 2.5			6 + .1	56 + 1.8			6 + .7	
7 + 0	57 + 1.4			7 + .1	57 + 2.2			7 + .8	
8 + 0	58 + 2.4			8 + .1	58 + 3.0			8 + 2.5	
9 + 0	59 + 2.4			19 + .1	59 + 2.2			9 + 6.2	
10 + 1.1	60 + 2.4			10 + .1	60 + 2.0			10 + 8.1	
11 + .1	61 + 2.4			11 + .3	61 + 2.0			11 + .1	
12 + 0	62 + 2.7			12 + .1	62 + 2.7			12 + .1	
13 + 0	63 + 3.2			13 + .1	63 + 3.1			13 + .1	
14 + 0	64 + 3.1			14 + .2	64 + .9			14 + .1	
15 + 0	65 + 2.8			15 + 0	65 + 1.5			15 + .9	
16 + 0	66 + 2.2			16 + 0	66 + 3.4			16 + 1.2	
17 + 0	67 + 2.5			17 + 0	67 - 3.5			17 + 1.4	
18 + 0	68 + 2.7			18 + 0	68 + 2.9			18 + 5.6	
19 + 0	69 + 2.6			19 + 0	69 + 2.1			19 + 8.0	
20 + 0	70 + 1.1			20 + 0	70 + 1.3			20 + .1	
21 + 0	71 + 1.6			21 + 0	71 + 1.5			21 - 1.4	
22 + 0	72 + 1.7			22 + 0	72 + 1.6			22 - 2.6	
23 + 0	73 + 1.7			23 + 0	73 + 1.7			23 - 2.6	
24 + 0	74 + 1.8			24 + .2	74 + .1			24 - 2.5	
25 + 0	75 + 1.8			25 + 0	75 + .5			25 + .2	
26 + 0	76 + 1.6			26 + 0	76 + 2.3			26 - 1.5	
27 + 0	77 + 2.0			27 + 0	77 + 3.0			27 + .2	
28 + 0	78 + 2.3			28 + 0	78 + 2.9			28 + 2.4	
29 + 0	79 + 2.7			29 + 0	79 + 2.9			29 + 5.2	
30 + 0	80 + 2.8			30 + 0	80 + 2.9			30 + .1	
31 + 0	81 + 2.6			31 + 0	81 + 2.8				
32 + 0	82 + 2.7			32 + 0	82 + 2.8			Seq. 5	
33 + 0	83 + 2.9			33 + 0	83 + 2.6				
34 + 0	84 + .7			34 + 0	84 + 2.6				
35 + 0	85 + 2.0			35 + 0	85 + 2.6				
36 + 0	86 + 2.1			36 + 0	86 + 2.5				
37 + 0	87 + 2.5			37 + 0	87 + 3.0				
38 + 0	88 + .8			38 + 0	88 + 2.7				
39 + 0	89 + 2.6			39 + 0	89 + 1.9				
40 + 0	90 + 1.8			40 + 0	90 + 1.9				
41 + 0	91 + 1.9			41 + 0	91 + 2.0				
42 + 0	92 + .2			42 + 0	92 + 3.0				
43 + 0	93 + 1.9			43 + 0	93 + 1.7				
44 + 0	94 + 1.7			44 + 0	94 + 6				
45 + 0	95 + 1.7			45 + 0	95 + 1.6				
46 + 0	96 + 1.7			46 + 0	96 + 1.6				
47 + 0	97 + 1.0			47 + 0	97 + 1.7				
48 + 0	98 + .1			48 + 0	98 + 2.0				
49 + 0	99 + 1			49 + 0	99 + 2.0				
50 + 0	100 + 1			50 + 0	100 + .1				

1906 .05 0° .10 0 10.0 -2.5° 1.010 2032.6 .002225

a)			b)			c)	
1 - .1	51 + .1		1 - .1	51 - .1		1 + .1	
2 - .1	52 + 1.0		2 - .1	52 + .8		2 + .1	
3 - .1	53 + .1		3 - .1	53 + .1		3 + .1	
4 - .1	54 + 3.7		4 - .1	54 + 2.4		4 + .1	
5 - .1	55 + 3.8		5 - .1	55 + 2.0		5 + .1	
6 - .1	56 + 3.1		6 - .1	56 + .5		6 + .2	
7 - .1	57 + 1.3		7 - .1	57 + 2.4		7 + .4	
8 - .1	58 + 2.1		8 - .1	58 + 4.6		8 + .8	
9 - .1	59 + 2.2		9 - .1	59 + 2.7		9 + 3.3	
10 + .2	60 + 2.2		10 - .1	60 + 1.2		10 + 5.7	
11 + 0	61 + 2.2		11 - .1	61 - 1.4		11 + .2	
12 - .1	62 + 2.3		12 - .1	62 + 2.4		12 - 1.0	
13 - .1	63 + 2.8		13 - .1	63 + 2.0		13 - 1.1	
14 - .1	64 + 3.0		14 - .1	64 + .5		14 - 1.1	
15 - .1	65 + 2.8		15 . 0	65 + 1.0		15 + .8	
16 - .1	66 + 2.5		16 . 0	66 + 3.0		16 + .6	
17 - .1	67 + 2.5		17 . 0	67 + 3.3		17 + 1.4	
18 - .1	68 + 2.5		18 + 0	68 + 2.9		18 + 6.0	
19 - .1	69 + 2.4		19 + 0	69 + 2.4		19 + 9.6	
20 - .1	70 + 1.2		20 . 0	70 + 1.2		20 + .2	
21 - .1	71 + 1.2		21 . 0	72 + 1.2		21 - 2.3	
22 - .1	72 + 1.2		22 . 0	72 + 1.0		22 - 3.4	
23 - .1	73 - 1.4		23 . 0	73 + 1.1		23 - 4.1	
24 - .1	74 - 1.6		24 + 1.1	74 - .8		24 - 3.0	
25 - .1	75 - 1.4		25 . 0	75 + .8		25 + .2	
26 - .1	76 - 1.4		26 . 0	76 + .8		26 - 1.8	
27 - .1	77 - 1.8		27 + 0	77 + 1.3		27 + .2	
28 - .1	78 + 2.3		28 - .1	78 + 1.8		28 + 3.3	
29 - .1	79 + 2.6		29 - .1	79 - 1.9		29 + 6.3	
30 - .1	80 + 2.7		30 - .1	80 + 2.1		30 + .1	
31 - .1	81 + 2.6		31 - .1	81 + 2.1			
32 - .1	82 + 2.6		32 - .1	82 + 2.1		Seq. 5	
33 - .1	83 + 2.5		33 - .1	83 + 2.2			
34 - .1	84 + .8		34 - .1	84 + 2.2			
35 - .1	85 + 1.8		35 - .1	85 + 2.2			
36 - .1	86 + 2.0		36 - .1	86 + 2.2			
37 - .1	87 + 2.1		37 - .1	87 + 4.8			
38 - .1	88 + 2.2		38 - .1	88 + 1.5			
39 - .1	89 + 2.3		39 - .1	89 + 1.5			
40 - .1	90 + 1.9		40 - .1	90 + 1.5			
41 - .1	91 + 1.9		41 - .1	91 + 1.5			
42 - .1	92 + .2		42 - .1	92 + 3.4			
43 - .1	93 + 1.7		43 - .1	93 + .7			
44 - .1	94 + 1.7		44 - .1	94 + .8			
45 - .1	95 + 1.5		45 - .1	95 + .8			
46 - .1	96 + 1.1		46 - .1	96 + .8			
47 - .1	97 + 1.3		47 - .1	97 + .9			
48 - .1	98 + .2		48 - .1	98 + 1.1			
49 - .1	99 + .1		49 - .1	99 + 1.3			
50 - .1	100 + .1		50 - .1	100 + .1			

a)				b)				c)		
1 + 0		51 + .1		1 - .1		51 + .1		1 + .1		
2 + 0		52 + .7		2 - 0		52 + .8		2 + .2		
3 + 0		53 + .1		3 + 0		53 + .5		3 + .1		
4 + 0		54 + 2.7		4 + 0		54 + 2.0		4 + .1		
5 + 0		55 + 3.1		5 + 0		55 + 2.2		5 + .1		
6 + 0		56 + 1.8		6 + 0		56 + 1.6		6 + .1		
7 + 0		57 + 1.5		7 + 0		57 + .5		7 + .2		
8 + 0		58 + 1.5		8 + 0		58 + 5.4		8 + .4		
9 + 0		59 + 1.5		9 + 0		59 + 5.5		9 + 2.2		
10 + .2		60 + 1.5		10 - 0		60 + 2.4		10 + 4.3		
11 - .1		61 + 1.5		11 + 0		61 + 2.2		11 - 1.3		
12 - .1		62 + 1.6		12 + 0		62 + 2.5		12 - 3.6		
13 + 0		63 + 1.8		13 + 0		63 + 2.7		13 - 3.4		
14 + 0		64 + 2.0		14 + 0		64 + 1.0		14 - 2.6		
15 + 0		65 + 2.0		15 + 0		65 + 1.0		15 + .2		
16 + 0		66 + 2.0		16 + 0		66 + 3.0		16 + .2		
17 + 0		67 + 2.0		17 + 0		67 + 3.6		17 + 1.6		
18 + 0		68 + 1.9		18 + 0		68 + 3.7		18 + 5.5		
19 + 0		69 + 1.9		19 + 0		69 + 2.7		19 + 7.4		
20 + .1		70 + .3		20 + 0		70 + 1.4		20 + .1		
21 + 0		71 + 3		21 + 0		71 + 1.4		21 - 3.3		
22 + 0		72 + .4		22 + 0		72 + 1.4		22 - 5.0		
23 + .1		73 + .5		23 + 0		73 + 1.4		23 - 5.0		
24 + .1		74 + .7		24 + 1.3		74 + 1.3		24 - 4.3		
25 + .1		75 + .7		25 + .1		75 + 1.3		25 + .3		
26 + .1		76 + .7		26 + 0		76 + 1.3		26 - 2.0		
27 + .1		77 + .9		27 + .1		77 + 1.3		27 + .3		
28 + .1		78 + 1.4		28 + .1		78 + 1.5		28 + 2.5		
29 + .2		79 + 1.7		29 - .1		79 + 2.0		29 + 5.3		
30 + .2		80 + 1.8		30 + 0		80 + 2.1		30 + .1		
31 + .2		81 + 1.8		31 + 0		81 + 2.1				
32 + .2		82 + 1.8		32 + .1		82 + 2.1		Seq. 5		
33 + .2		83 + 1.8		33 + .1		83 + 2.1				
34 + 2		84 + .8		34 + .2		84 + 2.1				
35 + .2		85 + .9		35 + .2		85 + 2.1				
36 - .1		86 + 1.1		36 + .2		86 + 2.1				
37 + 0		87 + 1.3		37 + .2		87 + 5.0				
38 + .1		88 + 1.5		38 + .2		88 + 1.5				
39 + .1		89 + 1.5		39 + .4		89 + 1.5				
40 + .1		90 + 1.4		40 - .1		90 + 1.5				
41 + .1		91 + 1.3		41 + .1		91 + 1.5				
42 + .1		92 + .1		42 + .1		92 + 5.2				
43 + .1		93 + .8		43 + .1		93 + .8				
44 + .1		94 + .9		44 + .1		94 + .8				
45 + .2		95 + .9		45 + .1		95 + .8				
46 + 0		96 + .9		46 + .1		96 + .9				
47 + 0		97 + .9		47 + .1		97 + 1.0				
48 + .1		98 + .2		48 + .1		98 + 1.2				
49 + .1		99 + .2		49 + .1		99 + 1.6				
50 + .1		100 + .1		50 + .2		100 + .2				

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1923    .05    0°   .10    0    10.0   +5.0°   1.049   2035.4   .002167

a) 1 + 0      51 ·   .2     b) 1 + 0      51 ·   .1     c) 1 +   .2
   2 + 0      52 · 1.1         2 ·   .1   52 + 1.2        2 -11.0
   3 + 0      53 +   .1        3 ·   .1   53 ·   .2       3 -18.2
   4 - 1.7    54 +13.0         4 ·   .1   54 · 6.2        4 -14.9
   5 -  .8    55 + 9.4         5 ·   .1   55 - 6.7        5 - 6.8
   6 +  .1    56 + 8.1         6 +   .1   56 - 3.9        6 - 7.7
   7 +  .2    57 · 8.2         7 ·   .1   57 · 5.4        7 +  .8
   8 +  .2    58 · 9.0         8     .2   58   7.5        8 -24.3
   9 +  .2    59 · 6.8         9 ·   .7   59 - 7.1        9 +37.5
  10 + 3.6    60 · 7.3        10 ·   .8   60 · 7.2       10  42.0
  11 + 0      61 · 8.1        11 · 6.5    61 · 7.5       11 - 4.8
  12 + 0      62 · 7.6        12 · 0      62   8.6       12 - 8.8
  13 + 0      63 + 7.3        13 ·   .1   63 · 9.0       13 -10.0
  14 + 0      64 + 8.0        14 · 9.8    64 · 1.9       14 - 6.4
  15 + 0      65 - 6.9        15 -   .1   65 - 4.9       15 · 6.3
  16 + 0      66 · 5.5        16 · 0      66 +13.5       16 - 2.3
  17 + 0      67 - 6.7        17 ·   .2   67 -16.5       17 -10.5
  18 + 0      68 - 8.7        18 ·   .2   68 -12.4       18 -27.5
  19 + 0      69 · 8.9        19 ·   .2   69 · 7.0       19 +37.7
  20 + 0      70 · 3.8        20 ·   .2   70 · 4.6       20 -  .4
  21 + 0      71 · 5.5        21 ·   .2   71 · 5.6       21 · 1.6
  22 + 0      72 · 7.8        22 ·   .2   72 ·   .1      22 +  .5
  23 - 0      73 · 8.5        23 ·   .3   73 - 7.2       23 -  .2
  24 · 0      74 · 1.9        24 ·   .4   74     .2      24 +  .2
  25 + 0      75 · 5.2        25 + 0      75 -   .7      25 · 2.3
  26 +  .1    76 · 8.4        26 ·   .2   76 -   .6      26 + 1.0
  27 +  .1    77 · 9.3        27     .6   77 - 7.7       27 - 1.3
  28 +  .1    78 · 4.0        28 ·   .5   78   27.5      28 - 7.0
  29 ·  .2    79 · 6.5        29 ·   .1   79 -22.3       29 ·18.9
  30 +  .2    80 · 10.2       30 ·   .1   80 · 9.1       30 ·   .1
  31 +  .2    81 · 10.4       31 · 0      81 · 7.3
  32 -  .8    82 · 10.0       32 · 0      82 · 6.5     Seq. 5
  33 -  .8    83   22.4       33 + 0      83 - 9.1
  34 +  .1    84 · 2.4        34 · 0      84 · 8.7
  35 +  .1    85 - 6.3        35 · 0      85 · 8.3
  36 +  .1    86 + 7.7        36 + 0      86 · 9.0
  37 +  1     87 · 9.2        37 · 0      87 - 5.5
  38 +  .1    88 ·   .3       38 · 0      88 - 7.5
  39 -  .7    89 · 19.0       39 · 0      89 + 6.3
  40 +  .1    90 · 7.5        40 · 0      90 - 7.6
  41 ·  .1    91 · 6.0        41 + 0      91 · 8.3
  42 +  .1    92 ·   .1       42 + 0      92 · 8.5
  43 +  .1    93 · 9.6        43 · 0      93 · 5.0
  44 +  .1    94 - 8.7        44 + 0      94 · 7.0
  45 +  .1    95 + 8.9        45 + 0      95 · 7.5
  46 +  .1    96 · 9.0        46 + 0      96 - 6.1
  47 +  .1    97 - 6.0        47 + 0      97 · 8.2
  48 +  .1    98 +   .1       48 + 0      98 - 8.3
  49 +  .1    99 +   .1       49 + 0      99 · 9.0
  50 +  .1   100 +   .1       50 · 0     100 ·   .1
```

1924   .05   0°   .10   0   10.0   +2.5°   1.049   2035.4   .002157

	a)			b)			c)
1 ± 0	51 ± .1	1 - .1	51 ± .1	1 ± .1
2 - .1	52 ± 1.5	2 ± 0	52 ± 1.0	2 - 6.0
3 - .1	53 ± .3	3 ± 0	53 ± .1	3 -13.7
4 - 1.4	54 ±13.3	4 ± 0	54 ± 7.6	4 -11.5
5 ± 0	55 ±11.8	5 ± .1	56 ± 8.4	5 - 3.8
6 ± 0	56 ±10.0	6 ± .2	56 ± 5.4	6 - 9.2
7 ± 0	57 ± 9.7	7 ± .2	57 ± 7.3	7 ± 2.0
8 ± 0	58 ±10.5	8 ± .2	58 ± 9.7	8 ±19.9
9 ± 0	59 ± 9.8	9 ± .5	59 ± 9.4	9 -34.1
10 - 1.6	60 ± 9.8	10 ± .6	60 ± 9.4	10 ±41.0
11 - .1	61 - 9.9	11 - 8.3	61 - 9.4	11 - 1.6
12 - .1	62 ±10.0	12 - .1	62 ±10.2	12 - 6.3
13 - .1	63 ±10.0	13 - .2	63 ±10.4	13 - 7.6
14 - .1	64 ±10.1	14 ± 8.1	64 ± 1.9	14 - 4.8
15 - .1	65 ±10.2	15 - .1	65 ± 6.2	15 ± 7.9
16 - .1	66 ± 8.7	16 ± 0	66 ±12.8	16 - 1.1
17 - .1	67 ± 9.2	17 ± .1	67 ±13.7	17 ±11.3
18 - .1	68 ±10.2	18 ± .2	68 ±11.2	18 ±29.5
19 - .1	69 ±10.4	19 ± .3	69 ± 8.3	19 ±40.9
20 - .1	71 ± 6.6	20 ± 0	70 - 7.5	20 ± .2
21 - .1	71 - 8.0	21 ± 0	71 ± 8.2	21 - 2.5
22 - .1	72 - 9.2	22 ± 0	72 - 8.5	22 ± .4
23 - .1	73 ± 9.8	23 - .1	73 - 9.1	23 ± .1
24 ± .1	74 - 9.3	24 ± 1.9	74 - .4	24 - .2
25 - .1	75 - 8.2	25 - .2	75 ± .5	25 ± 5.0
26 - .1	76 - 9.6	26 ± .4	76 ± 5.0	26 - .5
27 - .1	77 -10.4	27 ± .4	77 ±21.2	27 ± 1.8
28 ± .1	78 - 7.6	28 ± .4	78 -20.0	28 -11.1
29 - ..1	79 - 9.6	29 ± .4	79 ±13.5	29 ±26.2
30 - .1	80 ±11.0	30 ± .1	80 ± 8.8	30 ± .1
31 ± 0	81 -11.4	31 ± .1	81 - 9.6	
32 ± 0	82 -11.4	32 - .1	82 -10.3	
33 - 0	83 ±20.0	33 - .1	83 -10.5	Seq. 5
34 - 0	84 - 3.3	34 ± .1	84 ± 9.9	
35 - 0	85 ± 8.7	35 - .1	85 ± 9.9	
36 ± 0	86 - 9.4	36 ± .1	86 ±10.0	
37 ± 0	87 ±10.5	37 ± .2	87 - 8.2	
38 ± 0	88 - .8	38 ± .2	88 - 9.2	
39 - .5	89 ±22.9	39 ± .2	89 - 9.0	
40 ± 0	90 ± 7.7	40 ± .2	90 - 9.1	
41 - 0	91 ± 8.6	41 - .1	91 - 9.4	
42 - 0	92 ± .3	42 - .1	92 -10.9	
43 - 0	93 -10.0	43 - .1	93 ± 7.4	
44 - 0	94 -10.1	44 - .1	94 ± 8.2	
45 - 0	95 ±10.1	45 - .1	95 ± 8.7	
46 ± 0	96 ±10.1	46 - .1	96 ± 9.1	
47 ± 0	97 ± 6.2	47 - .1	97 ± 9.3	
48 ± 0	98 ± .1	48 - .1	98 ± 9.5	
49 ± 0	99 ± .1	49 - .1	99 ± 9.8	
50 ± 0	100 - .1	50 - .1	100 ± .1	

1925 .05 0) .10 0 10.0 0° 1.049 2035.4 .002167

a)				b)				c)	
1	- .1	51	+ .1	1	+ .1	51	- .1	1	- .1
2	- .1	52	± 1.1	2	+ 0	52	- 1.0	2	- .1
3	- .9	53	- .2	3	+ .3	53	- .1	3	- 6.9
4	- .9	54	-12.8	4	+ .2	54	- 5.0	4	- 6.1
5	- .9	55	-12.3	5	+ 1	55	-10.0	5	+ .2
6	+ 0	56	-11.4	6	+ .1	56	- 8.5	6	- 9.0
7	+ 0	57	-10.4	7	- .1	57	-13.1	7	- 1.7
8	+ 0	58	-10.9	8	- .1	58	-12.3	8	-13.4
9	+ 0	59	-10.7	9	- .1	59	-10.0	9	-30.4
10	- .8	60	-11.1	10	- .1	60	-10.0	10	-3?.6
11	+ 0	61	-11.0	11	- 4.8	61	-10.2	11	- .4
12	+ 0	62	-11.0	12	- 0	62	-11.3	12	- 5.2
13	- .1	63	-11.4	13	- .1	63	-11.9	13	- 6.8
14	- .1	64	-11.7	14	- 4.9	64	- 3.1	14	- 3.2
15	- .1	65	-11.8	15	- 0	65	- 8.3	15	- 8.8
16	- .1	66	-10.8	16	- .1	66	-15.2	16	- .4
17	- .1	67	-10.8	17	- .1	67	-14.6	17	-12.2
18	- .7	68	-11.4	18	- .1	68	-11.3	18	-31.1
19	+ 0	69	-11.6	19	- .2	69	- 9.9	19	-43.0
20	+ 0	70	- 9.2	20	- .2	70	- 9.6	20	- .1
21	- 0	71	- 9.9	21	- .2	71	- 9.6	21	- 1.5
22	0	72	-10.5	22	- .2	72	- 9.7	22	- 7.1
23	+ 0	73	-10.8	23	- .2	73	-10.1	23	- 6.7
24	- 0	74	- 9.6	24	- 4.6	74	- 2.0	24	- 1.8
25	- .1	75	- 9.7	25	- 0	75	- 6.3	25	- 8.5
26	- .1	76	-10.3	26	0	76	-13.2	26	- .2
27	- .1	77	-10.3	27	- 0	77	-14.0	27	- 8.6
28	+ 0	78	-10.6	28	- .2	78	-11.1	28	-21.5
29	- .1	79	-10.9	29	- .2	79	-10.9	29	-33.4
30	- .1	80	-11.4	30	- .2	80	-10.8	30	- .1
31	+ 0	81	-11.5	31	- .2	81	-10.9		
32	- .6	82	-11.6	32	- .2	82	-11.0	Seq. 5	
33	+ 0	83	-14.1	33	- .2	83	-11.3		
34	+ 0	84	+ 4.0	34	- .2	84	-11.4		
35	+ 0	85	-10.5	35	+ .2	85	-11.4		
36	+ 0	86	-10.9	36	- .1	86	-11.0		
37	+ 0	87	-11.3	37	+ 0	87	-14.5		
38	+ 0	88	- 3.7	38	- .2	88	-10.7		
39	- .8	89	-14.2	39	- .2	89	- 9.9		
40	+ 0	90	- 9.1	40	- 0	90	-10.5		
41	+ 0	91	- 9.9	41	- 0	91	-10.7		
42	+ 0	92	- .2	42	+ 0	92	-14.4		
43	+ 0	93	-10.7	43	+ 0	93	- 9.3		
44	+ 0	94	-10.9	44	+ 0	94	- 9.8		
45	- .1	95	-10.8	45	+ 0	95	-10.1		
46	- .1	96	-10.8	46	+ 0	96	-10.4		
47	- .1	97	- 6.8	47	+ 0	97	-10.6		
48	- 1	98	+ .1	48	+ 0	98	-10.7		
49	- .1	99	- .1	49	+ 0	99	-11.0		
50	- .1	100	+ .1	50	+ 0	100	- .2		

1926   .05   00   .10   0   10.0   -2.5°   1.048   ?035.4   .002167

a)				b)				c)	
1 + 0		51 .1		1 + 0		51 .2		1 .1	
2 + 0		52 1.0		2 0		52 1.4		2 4.1	
3 0		53 .1		3 0		53 .2		3 .5	
4 - 1.6		54 9.3		4 0		54 2.5		4 .2	
5 0		55 11.5		5 0		55 3.0		5 1.7	
6 + 0		56 11.0		6 0		56 3.1		6 6.2	
7 + 0		57 10.5		7 0		57 15.5		7 1.0	
8 0		58 8.1		8 0		58 2.5		8 5.1	
9 + 0		59 9.0		9 0		59 14.4		9 18.9	
10 .3		60 10.5		10 0		60 6.4		10 33.6	
11 - .8		61 10.8		11 0		61 9.5		11 3.0	
12 - .8		62 7.9		12 0		62 10.7		12 8.8	
13 0		63 9.7		13 0		63 11.6		13 10.2	
14 0		64 10.8		14 1.1		64 2.6		14 5.4	
15 0		65 11.0		15 .1		65 8.1		15 8.1	
16 0		66 2.2		16 0		66 17.1		16 1.4	
17 + 0		67 8.5		17 0		67 17.0		17 15.0	
18 - .4		68 10.0		18 .1		68 13.1		18 34.4	
19 - .4		69 10.3		19 .1		69 9.7		19 44.0	
20 - .5		70 8.8		20 .1		70 7.7		20 .3	
21 + .1		71 8.8		21 .1		71 8.0		21 7.2	
22 .1		72 8.8		22 .1		72 8.3		22 13.5	
23 + .1		73 9.1		23 .1		73 8.8		23 12.0	
24 .1		74 9.3		24 0		74 4.4		24 4.8	
25 - .1		75 8.8		25 .1		75 5.9		25 8.2	
26 - .1		76 8.9		26 .1		76 7.4		26 .4	
27 - .1		77 10.0		27 .1		77 6.3		27 15.1	
28 - .1		78 11.1		28 .1		78 10.1		28 25.4	
29 - .1		79 10.9		29 .1		79 10.5		29 35.5	
30 - .1		80 10.4		30 .1		80 10.7		30 .2	
31 - .1		81 10.5		31 .1		81 10.7			
32 - .3		82 11.0		32 .1		82 10.7		Sep. 5	
33 - .3		83 10.5		33 .1		83 10.8			
34 - .4		84 3.1		34 .1		84 11.0			
35 - .4		85 9.3		35 .1		85 11.2			
36 - 0		86 9.4		36 .1		86 11.3			
37 0		87 10.4		37 .1		87 25.9			
38 - 0		88 7.7		38 .2		88 11.6			
39 + 0		89 8.6		39 .5		89 9.3			
40 + 0		90 8.7		40 0		90 10.4			
41 0		91 9.0		41 + 0		91 10.8			
42 0		92 .1		42 0		92 22.7			
43 0		93 9.6		43 0		93 8.3			
44 0		94 9.5		44 0		94 9.1			
45 0		95 9.5		45 0		95 10.1			
46 0		96 9.6		46 0		96 10.5			
47 + 0		97 6.0		47 0		97 10.5			
48 + 0		98 .1		48 0		98 10.5			
49 + 0		99 .1		49 0		99 10.0			
50 + 0		100 .1		50 0		100 .1			

1927 .05 0° .10 0 10.0 -5.0° 1.048 2035.4 .002167

a)				b)				c)	
1	+ 0	51	+ .2	1	+ 0	51	+ .1	1	+ .2
2	+ 0	52	+ 1.5	2	+ 0	52	+ 1.7	2	+ 3.1
3	+ 0	53	+ .2	3	+ 0	53	+ .3	3	+ 1.0
4	- 1.9	54	+ 7.1	4	+ 0	54	+ 2.5	4	+ 1.2
5	+ .1	55	+11.3	5	+ 0	55	+ 1.8	5	+ 1.3
6	+ .1	56	+11.9	6	+ 0	56	+ .5	6	+ 4.4
7	+ .1	57	+10.9	7	+ 0	57	+ 1.1	7	+ 2.3
8	+ .1	58	+ 5.7	8	+ 0	58	+27.1	8	+ 3.9
9	+ .1	59	+ 8.6	9	+ 0	59	+26.6	9	+13.7
10	+ .4	60	+10.9	10	+ 0	60	+14.0	10	+26.0
11	- 1.2	61	+11.2	11	+ 0	61	+ 6.8	11	- 8.5
12	+ .1	62	+ 5.2	12	+ 0	62	+ 9.5	12	-13.4
13	+ .1	63	+ 8.4	13	+ 0	63	+10.4	13	-14.4
14	+ .1	64	+10.9	14	+ .2	64	+ 2.6	14	- 7.6
15	+ .1	65	+11.0	15	+ 0	65	+ 6.6	15	+ 5.1
16	+ .1	66	+ 6.5	16	+ 0	66	+16.4	16	- 2.6
17	+ .1	67	+ 7.0	17	+ 0	67	+17.9	17	+13.7
18	- .3	68	+ 9.6	18	+ 0	68	+12.8	18	+33.2
19	- .3	69	+10.1	19	+ 0	69	+ 8.0	19	+43.7
20	+ .1	70	+ 6.7	20	+ 0	70	+ 5.3	20	+ .1
21	+ .1	71	+ 7.1	21	+ .1	71	+ 6.2	21	-13.1
22	+ .1	72	+ 8.4	22	+ .1	72	+ 6.5	22	-20.0
23	+ .1	73	+ 9.6	23	+ .1	73	+ 7.5	23	-17.9
24	+ .1	74	+ 9.7	24	+ .2	74	+ 4.1	24	- 7.9
25	+ .1	75	+ 7.4	25	+ .3	75	+ 5.0	25	+ 7 8
26	+ .1	76	+ 8.3	26	+ .3	76	+ 5.8	26	+ .1
27	+ .1	77	+ 9.4	27	+ .3	77	+ 7.3	27	+20.9
28	+ .1	78	+12.0	28	+ .3	78	+ 8.0	28	+28.5
29	+ .1	79	+ 9.5	29	+ .3	79	+ 8.7	29	+37.6
30	+ .1	80	+ 9.0	30	+ .5	80	+ 8.9	30	+ .1
31	+ .1	81	+ 9.8	31	+ 0	81	+ 8.9		
32	+ .1	82	+10.7	32	+ 0	82	+ 9.0		Seq. 5
33	+ .1	83	+ 8.8	33	+ 0	83	+ 9.1		
34	+ .1	84	- 2.7	34	+ 0	84	+10.3		
35	+ .1	85	+ 7.8	35	+ 0	85	+10.8		
36	+ .1	86	+ 8.8	36	+ 0	86	+10.7		
37	+ .1	87	+10.2	37	+ .1	87	+29.2		
38	+ .1	88	+ 8.4	38	+ 0	88	+ 9.1		
39	+ .1	89	+ 6.4	39	+ 1.4	89	+ 9.0		
40	+ .1	90	+ 7.0	40	- .1	90	+10.1		
41	+ .1	91	+ 7.8	41	- .1	91	+10.7		
42	+ .1	92	+ .1	42	- .1	92	+30.1		
43	+ .1	93	+ 9.7	43	- .1	93	+ 7.1		
44	+ .1	94	+ 8.7	44	- .1	94	+ 8.0		
45	+ .1	95	+ 8 9	45	- .1	95	+ 9.5		
46	+ .1	96	+ 9.6	46	- .1	96	+10.3		
47	+ .1	97	+ 6.5	47	- .1	97	+ 9.0		
48	+ .1	98	+ .1	48	- .1	98	+ 9.6		
49	+ .1	99	+ .1	49	- .1	99	+10.1		
50	+ .1	100	+ .1	50	- .1	100	+ .1		

1952	.05	0°	.05	0	10.0	+2.5°	1.010	2046.0	.002264

a)				b)				c)	
1	− .1	51	+ .2	1	+ 0	51	+ .2	1	+ .1
2	− .1	52	+ 1.4	2	+ .1	52	+ 1.0	2	+ 1.9
3	− .1	53	+ .3	3	+ .1	53	+ .1	3	+ 2.0
4	− .1	54	+ 7.6	4	+ .1	54	+ 3.4	4	+ 2.0
5	− .1	55	+ 6.5	5	+ .1	55	+ 4.7	5	+ 2.0
6	− .1	56	+ 4.9	6	+ .1	56	+ 2.4	6	+ 3.5
7	− .1	57	+ 4.0	7	+ 0	57	+ 3.2	7	+ 3.4
8	− .1	58	+ 5.5	8	+ 0	58	+ 5.5	8	+ 4.4
9	− .1	59	+ 4.9	9	+ .1	59	+ 4.8	9	+ 9.5
10	+12.4	60	+ 4.9	10	+ .1	60	+ 4.4	10	+12.1
11	− .1	61	+ 4.9	11	+ 1.7	61	+ 4.5	11	+ 2.4
12	− .1	62	+ 5.4	12	+ 0	62	+ 5.6	12	+ 1.8
13	− .1	63	+ 5.6	13	+ 0	63	+ 5.8	13	+ 1.8
14	− .1	64	+ 5.5	14	+ 1.0	64	+ .7	14	+ 1.9
15	− .1	65	+ 5.0	15	+ 0	65	+ .7	15	+ 3.8
16	− .1	66	+ 4.9	16	+ 0	66	+ 4.2	16	+ 3.9
17	− .1	67	+ 4.9	17	+ .1	67	+ 5.4	17	+ 5.8
18	− .1	68	+ 5.0	18	+ .1	68	+ 5.4	18	+ .7
19	− .1	69	+ 4.9	19	+ .2	69	+ 4.2	19	+11.0
20	− .1	70	+ 3.2	20	+ .2	70	+ 3.8	20	+ .1
21	− .1	71	+ 3.9	21	+ .2	71	+ 3.9	21	+ 1.0
22	− .1	72	+ 4.1	22	+ .2	72	+ 4.0	22	+ 1.1
23	− .1	73	+ 4.1	23	+ .2	73	+ 4.1	23	+ 1.1
24	− .1	74	+ 4.1	24	+ .2	74	+ .1	24	+ 2.0
25	− .1	75	+ 4.1	25	+ .2	75	− .8	25	+ 3.2
26	− .1	76	+ 4.2	26	+ .3	76	− .8	26	+ 1.3
27	− .1	77	+ 4.5	27	+ .1	77	+ 5.6	27	+ 2.3
28	− .1	78	+ 4.5	28	+ .1	78	+ 6.4	28	+ 5.7
29	− .1	79	+ 5.0	29	+ .1	79	+ 5.0	29	+ 7.2
30	− .1	80	+ 5.1	30	+ .2	80	+ 4.8	30	+ .1
31	− .1	81	+ 5.1	31	+ 2	81	+ 4.9		
32	− .8	82	+ 5.1	32	+ 0	82	+ 5.1		Seq. 5
33	+ 0	83	+ 7.2	33	+ .1	83	+ 5.1		
34	+ 0	84	+ 1.8	34	+ .2	84	+ 4.7		
35	+ 0	85	+ 4.5	35	+ .2	85	+ 4.7		
36	+ 0	86	+ 4.6	36	+ .1	86	+ 4.7		
37	+ 0	87	+ 4.9	37	+ .2	87	+ 4.7		
38	− .1	88	+ .1	38	− .1	88	− 4.7		
39	− .8	89	+ 5.9	39	+ .2	89	+ 4.5		
40	− .1	90	+ 4.3	40	+ .2	90	+ 4.3		
41	− .1	91	+ 4.4	41	+ .2	91	+ 4.3		
42	− .1	92	+ .2	42	+ .2	92	+ 4.7		
43	− .1	93	+ 4.4	43	+ .2	93	+ 3.9		
44	− .1	94	+ 4.1	44	+ .2	94	+ 3.9		
45	− .1	95	+ 4.0	45	+ .2	95	+ 3.9		
46	− .1	96	+ 3.9	46	+ .2	96	+ 3.9		
47	− .1	97	+ 2.8	47	+ .2	97	+ 3.9		
48	− .1	98	+ .1	48	+ .2	98	+ 4.0		
49	− .1	99	+ .1	49	+ .2	99	+ 4.4		
50	− .1	100	+ .1	50	+ .2	100	+ .1		

1953 .05   0⁰   .05   0   10.0   0⁰ 1.011 2046.0 .002264

a)			b)			c)	
1 + 0	51 + .1		1 + 0	51 · .1		1 · .1	
2 + 0	52 · 1.0		2 + 0	52 1.1		2 + 1.9	
3 + 0	53 + .2		3 + 0	53 .2		3 · .4	
4 − 1.1	54 * 7.3		4 · 0	54 2.1		4 · .6	
5 + 0	55 + 6.9		5 + 0	55 · 2.5		5 · 1.2	
6 + 0	56 + 5.0		6 + 0	56 + 2.2		6 + 3.2	
7 + 0	57 · 4.6		7 · 0	57 3.9		7 · 2.9	
8 + 0	58 · 5.5		8 · 0	58 · 5.4		8 + 4.2	
9 + 0	59 · 5.0		9 · .1	59 · 5.1		9 − 8.4	
10 · 4.7	60 · 5.0		10 + .1	60 · 4.9		10 −10.3	
11 − .9	61 · 5.2		11 · .1	61 · 4.8		11 + 2.4	
12 + 0	62 · 5.4		12 · .1	62 5.1		12 + .6	
13 + 0	63 · 5.6		13 · .1	63 5.3		13 + .8	
14 · 0	64 · 5.7		14 · .1	64 · .2		14 + 1.2	
15 + 0	65 · 5.3		15 · .1	65 .4		15 · 3.2	
16 + 0	66 · 5.2		16 · 0	66 4.3		16 + 2.5	
17 + 0	67 · 5.2		17 · .1	67 · 5.1		17 − 3.7	
18 − 1,2	68 · 5.2		18 · .1	68 · 5.0		18 · 8.9	
19 + 0	69 · 4.9		19 · .2	69 · 4.4		19 · 11.7	
20 + 0	70 · 3.5		20 · .2	70 · 3.8		20 + .1	
21 − 0	71 · 4.0		21 · .2	71 · 3.9		21 + .6	
22 + 0	72 · 4.1		22 + .2	72 + 4.0		22 + .1	
23 + 0	73 · 4.1		23 · .2	73 4.1		23 + .1	
24 + 0	74 · 4.2		24 · .2	74 · .1		24 + .4	
25 − .7	75 · 4.2		25 · .2	75 + .1		25 + 2.3	
26 + 0	76 · 4.1		26 · .3	76 · 3.0		26 − 1.2	
27 + 0	77 · 4.4		27 · .3	77 · 4.8		27 + 2.1	
28 + 0	78 · 4.6		28 · .3	78 + 5.0		28 + 4.5	
29 + 0	79 − 4.8		29 · .3	79 · 5.0		29 − 7.0	
30 + 0	80 · 5.0		30 · .3	80 · 5.0		30 + .1	
31 + 0	81 · 5.0		31 + .3	81 · 5.0			
32 − .9	82 + 5.0		32 + .3	82 5.1		Seq. 5	
33 + 0	83 + 5.1		33 · .3	83 · 5.0			
34 + 0	84 + 1.4		34 · .3	84 + 5.1			
35 + 0	85 + 4.7		35 + .3	85 + 5.1			
36 + 0	86 + 4.6		36 + .3	86 · 5.1			
37 + 0	87 + 4.8		37 · .3	87 · 5.0			
38 + 0	88 + .1		38 · .3	88 · 5.2			
39 − 1.2	89 · 4.9		39 + .3	89 + 4.8			
40 + 0	90 · 3.8		40 + .3	90 · 4.6			
41 + 0	91 + 4.0		41 + .1	91 · 4.4			
42 + 0	92 · .1		42 + .1	92 · 5.0			
43 + 0	93 + 4.0		43 · .1	93 · 4.6			
44 + 0	94 + 4.0		44 + .1	94 · 4.6			
45 + 0	95 · 3.8		45 + .1	95 · 4.0			
46 + 0	96 · 3.8		46 + .1	96 4.0			
47 + 0	97 + 3.2		47 + .1	97 · 4.0			
48 + 0	98 + .1		48 + .1	98 · 4.2			
49 + 0	99 · .1		49 · .1	99 + 4.4			
50 + 0	100 + .1		50 + .1	100 + .1			

1954   .05   0°   .05   0   10.0   -2.5°   1.011   2046.0   .002264

a)						b)						c)		
1	+	0	51	-	.2	1	+	0	51	+	.1	1	+	.1
2	+	0	52	+	1.0	2	+	0	52	+	1.1	2	+	2.6
3	+	0	53	+	.2	3	+	0	53	+	.2	3	+	1.9
4	-	2.1	54	+	7.1	4	+	0	54	+	2.2	4	+	1.9
5	+	0	55	+	7.0	5	+	0	55	-	1.5	5	+	2.0
6	+	0	56	+	5.7	6	+	0	56	+	.1	6	+	3.1
7	+	0	57	+	4.1	7	+	0	57	+	1.1	7	+	3.5
8	+	0	58	+	5.2	8	+	0	58	+	7.7	8	+	4.3
9	+	0	59	+	5.2	9	+	0	59	+	4.9	9	+	8.8
10	+	1.4	60	+	5.2	10	+	0	60	+	4.9	10	+	10.1
11	-	1.4	61	+	5.2	11	-	.8	61	+	4.9	11	-	2.5
12	+	0	62	+	5.3	12	+	.1	62	+	5.4	12	+	2.0
13	+	0	63	+	5.7	13	+	.1	63	+	5.8	13	+	2.0
14	+	0	64	+	5.8	14	+	.1	64	+	.5	14	+	2.0
15	+	0	65	+	5.4	15	+	.1	65	+	1.0	15	+	3.8
16	+	0	66	+	5.2	16	+	.1	66	+	5.5	16	+	5.3
17	+	0	67	+	5.2	17	+	.1	67	+	6.3	17	+	5.6
18	-	2.0	68	+	5.2	18	+	.1	68	+	5.7	18	+	9.8
19	+	0	69	+	5.0	19	+	.1	69	+	3.8	19	+	11.0
20	+	0	70	+	4.3	20	+	.1	70	+	3.7	20	+	.1
21	+	0	71	+	4.3	21	+	.1	71	+	3.8	21	+	.9
22	+	0	72	+	4.3	22	+	.1	72	+	3.9	22	+	.2
23	+	0	73	+	4.3	23	+	.1	73	+	4.0	23	+	.8
24	+	0	74	+	4.3	24	+	.3	74	+	.3	24	+	.8
25	-	.7	75	+	4.3	25	+	.1	75	+	1.6	25	+	3.1
26	+	.2	76	+	4.3	26	+	.1	76	+	3.0	26	+	1.2
27	+	.1	77	+	4.5	27	+	.1	77	+	4.1	27	+	2.1
28	+	.1	78	+	4.9	28	+	.1	78	+	4.8	28	+	5.2
29	+	.1	79	+	5.1	29	+	.1	79	+	5.0	29	+	9.3
30	+	.1	80	+	5.3	30	+	.1	80	+	5.2	30	+	.1
31	-	.1	81	+	5.3	31	+	.1	81	+	5.2			
32	-	.7	82	+	5.3	32	+	.1	82	+	5.2	Seq. 5		
33	+	.1	83	+	5.3	33	+	.1	83	+	5.2			
34	+	.1	84	+	1.7	34	-	.1	84	+	5.2			
35	-	.1	85	+	4.4	35	-	.1	85	+	4.6			
36	+	.1	86	+	4.6	36	-	.1	86	+	5.2			
37	+	.1	87	+	4.8	37	+	.1	87	+	7.4			
38	+	.1	88	+	2.1	38	+	.1	88	+	4.8			
39	-	.6	89	+	4.0	39	+	.1	89	+	4.9			
40	+	.1	90	+	4.2	40	+	.1	90	+	4.6			
41	+	0	91	+	4.3	41	+	.1	91	+	4.7			
42	+	0	92	+	.2	42	+	.1	92	+	5.8			
43	+	0	93	+	4.0	43	+	.1	93	+	4.0			
44	+	0	94	+	4.1	44	+	.1	94	+	4.1			
45	+	0	95	+	4.1	45	+	.1	95	+	4.0			
46	+	0	96	+	4.1	46	+	.1	96	+	4.0			
47	+	0	97	+	3.2	47	+	.1	97	+	4.0			
48	+	0	98	+	.1	48	+	.1	98	+	4.2			
49	+	0	99	+	.1	49	+	.1	99	+	4.3			
50	+	0	100	+	.1	50	+	.1	100	+	.1			

1964 .05 0° .05 0 10.0 +2.5° 1.049 2042.4 .002199

a)				b)				c)	
1	− .1	51	+ .2	1	+ 0	51	+ .2	1	+ .1
2	+ .1	52	− .9	2	+ 0	52	+ 1.0	2	+10.3
3	+ .1	53	+ .1	3	+ 0	53	+ .3	3	+ 5.0
4	− 3.4	54	+23.4	4	+ 0	54	+ 7.0	4	+ 5.7
5	− .9	55	+22.1	5	+ 0	55	+13.8	5	+10.2
6	+ 0	56	−20.4	6	+ 0	56	+10.5	6	+21.1
7	+ 0	57	+20.6	7	+ 0	57	+17.7	7	−11.9
8	+ 0	58	+21.3	8	+ 0	58	+21.0	8	+23.9
9	+ 0	59	−20.6	9	+ 0	59	+21.2	9	+40.7
10	+18.4	60	−20.6	10	· 0	60	+21.0	10	+50.6
11	− 3.3	61	+20.0	11	− 7.5	61	−21.0	11	+ 9.8
12	− .8	62	+20.6	12	− .1	62	−21.9	12	+ 4.9
13	+ 0	63	+20.7	13	− .1	63	−21.9	13	+ 3.6
14	+ 0	64	+20.9	14	+ 3.9	64	− .2	14	+ 7.1
15	+ 0	65	−21.0	15	− .1	65	− 2.7	15	−20.4
16	+ 0	66	+19.5	16	− .1	66	−18.2	16	−13.0
17	+ 0	67	+20.2	17	− .1	67	−23.9	17	−27.3
18	− 2.8	68	20.7	18	− .1	68	+21.4	18	+42.3
19	− .4	69	−20.9	19	− .1	69	+19.5	19	−49.3
20	+ 0	70	−17.6	20	− .1	70	−19.5	20	− .1
21	+ 0	71	+19.5	21	− .1	71	−19.7	21	−12.9
22	− 0	72	−20.2	22	− .1	72	−19.9	22	− 9.7
23	− 0	73	−20.4	23	− .1	73	−20.4	23	− 9.4
24	+ 0	74	−18.3	24	− 1.3	74	− .5	24	−11.3
25	− 3.6	75	+20.1	25	− 0	75	− 2.8	25	−17.7
26	− .5	76	+20.8	26	+ 0	76	− 3.2	26	−12.1
27	− 0	77	+21.1	27	· .1	77	+26.1	27	−14.0
28	+ 0	78	+19.3	28	+ .1	78	+28.2	28	−26.9
29	+ .2	79	+21.9	29	+ .1	79	−22.3	29	+37.2
30	+ .3	80	+22.0	30	+ .1	80	+21 0	30	· .1
31	− .3	81	+21.2	31	+ 0	81	+21.6		
32	− 4.7	82	+21.4	32	+ 0	82	+21.9	Seq. 5	
33	− .7	83	−32.0	33	− 0	83	+22.0		
34	+ .1	84	− 8.3	34	− 0	84	−20.5		
35	+ 2	85	−20.9	35	+ 0	85	+20.9		
36	+ .2	86	+20.9	36	+ 0	86	+21.0		
37	+ .3	87	+21.0	37	+ 0	87	+20.0		
38	+ .3	88	− .9	38	− 0	88	−20.7		
39	− 6.0	89	+27.8	39	+ 0	89	20.7		
40	+ 0	90	+19.7	40	+ 0	90	−20.7		
41	+ 0	91	+20.5	41	− .1	91	−20.7		
42	+ 0	92	− .8	42	− .1	92	−21.3		
43	+ 0	93	+21.4	43	− .1	93	+19.0		
44	+ 0	94	+20.4	44	− .1	94	−19.6		
45	+ 0	95	−20.6	45	− .1	95	+19.8		
46	− .1	96	−20.4	46	− .1	96	+20.1		
47	+ 0	97	+14.8	47	− .1	97	+20.0		
48	+ .1	98	− .1	48	− .1	98	−20.6		
49	+ .1	99	+ .1	49	− .1	99	+20.9		
50	· .1	100	+ .2	50	− .1	100	+ .2		

a)				b)				c)	
1	+ 0	51	- .1	1	- .1	51	.1	1	.1
2	· 0	52	· .9	2	+ 0	52	.6	2	11.0
3	- .1	53	· .2	3	0	53	.1	3	7.4
4	- 5.2	54	· 24.3	4	0	54	1.1	4	7.6
5	- .5	55	24.4	5	· .1	55	4.4	5	11.5
6	0	56	23.0	6	· .1	56	6.0	6	20.2
7	- 0	57	22.7	7	+ 0	57	22.2	7	13.9
8	· 0	58	22.9	8	· 0	58	22.9	8	24.2
9	· 0	59	23.0	9	· .1	59	22.6	9	38.6
10	· 5.4	60	23.2	10	.1	60	22.6	10	46.5
11	- 4.9	61	23.2	11	- .1	61	22.6	11	12.6
12	- .7	62	23.2	12	- .1	62	23.0	12	8.4
13	· 0	63	23.6	13	- .1	63	23.4	13	6.5
14	0	64	23.8	14	- .1	64	- .5	14	9.6
15	· 0	65	23.8	15	- .1	65	· 3.2	15	19.8
16	0	66	22.7	16	- .1	66	20.0	16	12.7
17	- 0	67	22.7	17	- .1	67	24.3	17	23.2
18	- 5.4	68	23.1	18	- .1	68	22.0	18	39.9
19	- .9	69	23.3	19	- 0	69	21.7	19	50.1
20	+ 0	70	20.6	20	· 0	70	21.7	20	.1
21	+ 0	71	21.5	21	· 0	71	21.7	21	11.7
22	· 0	72	22.0	22	· .1	72	21.7	22	7.4
23	+ 0	73	22.3	23	.1	73	21.9	23	7.3
24	+ 0	74	21.1	24	.1	74	- .2	24	10.4
25	- 4.3	75	21.5	25	.1	75	.5	25	19.3
26	- 1.0	76	22.0	26	.1	76	15.5	26	12.2
27	- .4	77	22.7	27	.1	77	24.3	27	16.0
28	- .4	78	22.9	28	.1	78	22.0	28	30.0
29	- .4	79	22.9	29	.1	79	22.0	29	39.7
30	+ 0	80	3.1	30	.1	80	22.1	30	.2
31	+ 0	81	23.0	31	.1	81	22.4		
32	- 5.1	82	- 3.4	32	.2	82	22.8	Set. 5	
33	- .7	83	24.8	33	.2	83	22.9		
34	- .1	84	- 9.6	34	.2	84	23.0		
35	+ .1	85	22.5	35	+ .2	85	23.0		
36	+ .1	86	22.6	36	.2	86	23.0		
37	· .1	87	23.0	37	.2	87	24.8		
38	- .1	88	.1	38	.2	88	23.8		
39	- 4.5	89	24.8	39	.2	89	21.8		
40	+ 0	90	21.2	40	.2	90	22.2		
41	· 0	91	21.9	41	+ 0	91	22.0		
42	+ 0	92	1.1	42	· 0	92	24.8		
43	· 0	93	22.7	43	+ 0	93	21.4		
44	+ 0	94	22.7	44	· 0	94	21.8		
45	+ 0	95	22.6	45	· 0	95	22.0		
46	+ 0	96	22.9	46	+ 0	96	22.1		
47	+ 0	97	16.3	47	+ 0	97	22.3		
48	+ 0	98	+ .1	48	+ 0	98	22.4		
49	+ 0	99	· .2	49	+ 0	99	22.5		
50	+ 0	100	+ .1	50	+ 0	100	+ .1		

1966　.05　0°　.05　0　10.0　-2.5°　1.048　2042.4　.002199

a)				b)				c)	
1 + 0		51 + .1		1 - .1		51 + .1		1 + .1	
2 + 0		52 + 1.0		2 - .1		52 + 1.1		2 +13.0	
3 + 0		53 + .2		3 - .1		53 + .1		3 + 9.9	
4 - 6.5		54 +21.9		4 - .1		54 + .8		4 +10.1	
5 + .1		55 +23.0		5 - .1		55 - .7		5 +11.0	
6 + .1		56 +22.6		6 - .1		56 - 2.5		6 +18.7	
7 + .1		57 +20.4		7 - .1		57 + 5.7		7 +13.7	
8 + .1		58 +20.2		8 - .1		58 +30.2		8 +20.9	
9 + .1		59 +21.0		9 - .1		59 +22.6		9 +34.5	
10 + 1.4		60 +21.6		10 - .1		60 +20.8		10 +44.2	
11 - 6.3		61 +21.6		11 - 3.1		61 +21.3		11 +10.1	
12 + .1		62 +20.6		12 - .1		62 +22.4		12 + 4.6	
13 + .1		63 +21.9		13 - .1		63 +22.8		13 + 3.3	
14 + .1		64 +22.1		14 - 3.0		64 + 1.0		14 + 8.0	
15 + .1		65 +22.1		15 + 0		65 + 3.1		15 +20.1	
16 + .1		66 +18.9		16 + 0		66 +22.0		16 +14.0	
17 + .1		67 +20.0		17 + 0		67 +28.5		17 +29.7	
18 - 5.9		68 +20.8		18 + 0		68 +22.5		18 +44.1	
19 + .1		69 +21.1		19 + 0		69 +18.8		19 +49.6	
20 + .1		70 +18.8		20 + 0		70 +18.8		20 + .2	
21 + .1		71 +19.4		21 + 0		71 +19.1		21 +10.4	
22 + .1		72 +19.8		22 + 0		72 +19.5		22 + 5.0	
23 + .1		73 +20.2		23 + 0		73 +20.1		23 + 5.4	
24 + .1		74 +20.4		24 + 3.2		74 + 4.4		24 + 9.6	
25 - 3.5		75 +20.4		25 - .1		75 + 9.7		25 +19.6	
26 + .1		76 +20.3		26 + 0		76 +15.5		26 +10.7	
27 + .1		77 +20.5		27 + 0		77 +19.1		27 +16.3	
28 + .1		78 +21.7		28 + 0		78 +20.3		28 +31.2	
29 + .1		79 +21.8		29 + 0		79 +20.8		29 +43.5	
30 + .1		80 +21.8		30 + 0		80 +21.0		30 + .2	
31 + .1		81 +21.6		31 + 0		81 +21.0			
32 - 2.6		82 +21.6		32 + 0		82 +21.1		Seq. 5	
33 + .1		83 +21.6		33 + 0		83 +21.1			
34 + .1		84 + 8.6		34 + 0		84 +21.2			
35 + .1		85 +20.1		35 + 0		85 + 1.4			
36 + .1		86 +20.4		36 - 1.1		86 +21.5			
37 + .1		87 +21.0		37 + .3		87 +34.9			
38 + 0		88 + 3.6		38 + 0		88 +22.2			
39 - 2.9		89 +19.1		39 + 0		89 +20.4			
40 + .1		90 +19.6		40 - .1		90 +20.9			
41 + .1		91 +20.0		41 - .1		91 +21.0			
42 + .1		92 + 1.2		42 - .1		92 +26.4			
43 + .1		93 +20.5		43 - .1		93 +19.9			
44 + .1		94 +20.6		44 - .1		94 +20.6			
45 + .1		95 +20.6		45 - .1		95 +20.7			
46 + .1		96 +20.6		46 - .1		96 +20.7			
47 + 0		97 +15.1		47 - .1		97 +20.8			
48 + .1		98 + .1		48 - .1		98 +20.7			
49 + 0		99 + .2		49 - .1		99 +20.8			
50 + 0		100 . .1		50 - .1		100 + .1			

1985 .05 0° .03 0 10.0 +2.5° 1.010 2038.9 .002119

a)				b)				c)	
1 + .1		51 + .2		1 + 0		51 + .1		1 + .1	
2 + .1		52 + 1.8		2 + .1		52 + 1.3		2 + 5.7	
3 + .1		53 + .2		3 + .1		53 + .1		3 + 4.9	
4 - 1.4		54 + 9.6		4 + .1		54 + 3.6		4 + 4.9	
5 + .1		55 + 8.5		5 + .1		55 + 4.8		5 + 5.1	
6 + .1		56 + 6.8		6 + .1		56 + 3.2		6 + 5.7	
7 + .1		57 + 6.1		7 + .1		57 + 5.0		7 + 5.8	
8 + .1		58 + 7.3		8 + .1		58 + 7.2		8 + 6.0	
9 + .1		59 + 6.5		9 + .1		59 + 6.2		9 + 8.3	
10 +11.4		60 + 6.7		10 + 1		60 + 6.4		10 +10.3	
11 - .9		61 + 6.7		11 + 1.0		61 + 6.5		11 + 4.7	
12 + .1		62 + 7.0		12 - .1		62 + 7.4		12 + 4.4	
13 + .1		63 + 7.5		13 - .1		63 + 7.5		13 + 4.4	
14 + .1		64 + 7.6		14 - .1		64 + .4		14 + 4.5	
15 + .1		65 + 7.4		15 - .1		65 + .2		15 + 5.7	
16 + .1		66 + 7.4		16 - .1		66 + 2.9		16 + 5.8	
17 + .1		67 + 7.4		17 - .1		67 + 6.8		17 + 6.8	
18 - 1.0		68 + 7.4		18 - .1		68 + 6.9		18 +10.5	
19 + .1		69 + 6.7		19 - .1		69 + 6.1		19 +10.6	
20 + .1		70 + 5.5		20 - .1		70 + 5.0		20 + .1	
21 + .1		71 + 6.1		21 - .1		71 + 5.8		21 + 4.6	
22 + .1		72 + 6.2		22 - .1		72 + 5.9		22 + 2.9	
23 + .1		73 + 6.2		23 - .1		73 + 5.9		23 + 3.3	
24 + .1		74 + 6.3		24 - 1.3		74 + .1		24 + 4.1	
25 - 1.8		75 + 6.3		25 + 0		75 - .8		25 + 5.0	
26 + .1		76 + 6.2		26 + 0		76 - 2.6		26 + 4.4	
27 + .1		77 + 6.6		27 + 0		77 + .2		27 + 4.6	
28 + .2		78 + 6.7		28 + 0		78 + 7.8		28 + 6.9	
29 + .2		79 + 7.1		29 + 0		79 + 6.9		29 + 8.1	
30 + 2		80 + 7.1		30 + 0		80 + 7.0		30 + .1	
31 + .2		81 + 7.0		31 + 0		81 + 6.9			
32 - 2.2		82 + 7.0		32 + 0		82 + 7.0		Seq. 5	
33 + .1		83 + 8.6		33 + 0		83 + 6.7			
34 + .1		84 + 2.9		34 + 0		84 + 6.0			
35 + .1		85 + 6.4		35 + 0		85 + 6.0			
36 + .1		86 + 6.4		36 + 0		86 + 6.5			
37 + .1		87 + 6.9		37 + 0		87 + 6.5			
38 + .1		88 + .7		38 + 0		88 + 6.8			
39 - 2.1		89 + 7.5		39 + 0		89 + 6.5			
40 + .1		90 + 6.6		40 + 0		90 + 5.9			
41 + .1		91 + 6.3		41 + 0		91 + 6.0			
42 + .1		92 + .6		42 + 0		92 + 6.5			
43 + .1		93 + 6.5		43 + 0		93 + 5.8			
44 + .1		94 + 6.2		44 + 0		94 + 5.8			
45 + .1		95 + 6.0		45 + 0		95 + 5.9			
46 + .1		96 + 6.0		46 + 0		96 + 5.5			
47 + .1		97 + 5.6		47 + 0		97 + 5.8			
48 + .1		98 + .2		48 + 0		98 + 6.1			
49 + .1		99 + .4		49 + 0		99 + 6.4			
50 + .1		100 + .1		50 + 0		100 + .1			

a)				b)				c)	
1 + 0	51 + .1			1 + 0	51 + .2			1 + .1	
2 + 0	52 + 1.0			2 + .2	52 + .9			2 + 5.9	
3 + 0	53 + .2			3 + .2	53 + .1			3 + 4.4	
4 - 2.5	54 + 9.1			4 + .2	54 + 1.9			4 + 4.7	
5 + 0	55 + 8.6			5 + .2	55 + 1.4			5 + 5.6	
6 + 0	56 + 6.7			6 + .2	56 + .9			6 + 7.2	
7 + 0	57 + 6.2			7 + .2	57 + 5.1			7 + 7.2	
8 + 0	58 + 7.1			8 + .2	58 + 7.2			8 + 8.1	
9 + 0	59 + 5.9			9 + .2	59 + 7.0			9 + 11.5	
10 + 3.2	60 + 5.8			10 + .2	60 + 6.4			10 + 12.9	
11 - 2.1	61 + 6.8			11 - 1.0	61 + 6.4			11 + 6.9	
12 + 0	62 + 7.2			12 + .1	62 + 7.1			12 + 5.3	
13 + .1	63 + 7.4			13 + 0	63 + 7.4			13 + 5.5	
14 + .1	64 + 7.5			14 - .9	64 + .4			14 + 6.0	
15 + .1	65 + 7.3			15 + 0	65 + .2			15 + 7.5	
16 + .1	66 + 7.0			16 + .1	66 + 3.3			16 + 7.2	
17 + .1	67 + 7.0			17 + .1	67 + 7.1			17 + 7.6	
18 - 2.2	68 + 7.1			18 + .1	68 + 7.0			18 + 11.1	
19 + 0	69 + 6.2			19 + .1	69 + 6.8			19 + 12.8	
20 + .2	70 + 5.5			20 + .1	70 + 6.1			20 + .2	
21 + .2	71 + 5.9			21 + 2	71 + 6.2			21 + 4.8	
22 + .2	72 + 5.0			22 + .2	72 + 6.3			22 + 3.4	
23 + .3	73 + 6.0			23 + .2	73 + 6.3			23 + 3.7	
24 + .3	74 + 6.1			24 - .7	74 + .1			24 + 4.4	
25 - 1.7	75 + 6.2			25 + 0	75 - 1.2			25 + 5.5	
26 + 0	76 + 6.1			26 + 0	76 + 1.3			26 + 4.9	
27 + 0	77 + 6.2			27 + 0	77 + 6.6			27 + 5.1	
28 + 0	78 + 6.4			28 + 0	78 + 6.9			28 + 8.1	
29 + 0	89 + 6.8			29 + 0	79 + 7.0			29 + 9.5	
30 + 0	80 + 6.9			30 + 0	80 + 7.2			30 + .1	
31 + 0	81 + 6.8			31 + 0	81 + 6.9				
32 - 1.9	82 + 7.0			32 + 0	82 + 7.1			Seq. 5	
33 + 0	83 + 6.9			33 + 0	83 + 7.1				
34 + 0	84 + 2.5			34 + 0	84 + 6.8				
35 + .1	85 + 6.3			35 + 0	85 + 6.8				
36 + 1	86 + 6.3			36 + 0	86 + 6.8				
37 + .1	87 + 6.8			37 + 0	87 + 7.0				
38 + .1	88 + .2			38 + 0	88 + 7.2				
39 - 1.9	89 + 6.4			39 + 0	89 + 6.6				
40 + 0	90 + 6.2			40 + 0	90 + 6.5				
41 + .1	91 + 6.2			41 + 0	91 + 6.6				
42 + .1	92 + .2			42 + 0	92 + 6.8				
43 + .1	93 + 6.1			43 + 0	93 + 6.5				
44 + .2	94 + 5.9			44 + 0	94 + 5.3				
45 + 2	95 + 5.8			45 + 0	95 + 6.3				
46 + .2	96 + 5.7			46 + 0	96 + 5.8				
47 + 2	97 + 5.4			47 + 0	97 + 6.0				
48 + .2	98 + .1			48 + 0	98 + 6.3				
49 + .2	99 + .1			49 + 0	99 + 6.6				
50 + .2	100 + .1			50 + 0	100 + .1				

1987　.05　　0°　.03　0　10.0　-2.5°　1.010　2038.9　.002119

a)				b)				c)	
1	- .1	51	+ .2	1	+ 0	51	+ .1	1	- 1
2	- .1	52	+ 1.1	2	+ 0	52	+ 1.5	2	+ 4.3
3	- .1	53	+ .1	3	- .1	53	+ .3	3	+ 3.3
4	- 2.8	54	+ 8.6	4	- 1	54	+ 2.6	4	+ 3.5
5	+ 0	55	+ 8.2	5	- .1	55	+ 1.4	5	+ 4.0
6	+ 0	56	+ 6.6	6	- .1	56	+ .1	6	+ 5.0
7	- .1	57	+ 6.0	7	- .1	57	- 5.4	7	+ 5.3
8	- .1	58	+ 6.7	8	- .1	58	+ 8.8	8	+ 5.9
9	- .1	59	+ 6.9	9	- .1	59	+ 6.6	9	+ 8.6
10	+ .7	60	+ 6.7	10	- .1	60	+ 6.7	10	+ 10.2
11	- 2.3	61	+ 6.6	11	- 1.3	61	+ 6.8	11	+ 4.4
12	+ 0	62	+ 6.6	12	+ 0	62	+ 7.5	12	+ 3.9
13	+ 0	63	+ 6.9	13	+ 0	63	+ 7.7	13	+ 4.1
14	+ 0	64	+ 7.1	14	- 1.4	64	+ .8	14	+ 4.5
15	+ 0	65	+ 6.9	15	+ 0	65	+ .6	15	+ 5.9
16	+ 0	66	+ 6.7	16	+ 0	66	+ 4.2	16	+ 5.8
17	+ 0	67	+ 6.7	17	+ 0	67	+ 7.7	17	+ 6.5
18	- 2.8	68	- 6.7	18	+ 0	68	- 7.3	18	+ 9.1
19	+ 0	69	+ 6.6	19	+ 0	69	- 6.5	19	- 10.6
20	+ 0	70	+ 5.4	20	+ 0	70	+ 5.5	20	- 2
21	+ 0	71	+ 5.5	21	+ 0	71	+ 5.9	21	- 3.9
22	+ 0	72	+ 5.7	22	+ 0	72	+ 6.0	22	+ 3.0
23	+ 0	73	+ 5.7	23	+ 0	73	- 6.1	23	- 3.0
24	+ 0	74	+ 5.7	24	+ 0	74	+ .4	24	- 3.4
25	- 2.4	75	+ 5.8	25	+ 0	75	+ 1.8	25	+ 4.3
26	+ 0	76	+ 5.8	26	+ 0	76	+ 4.5	26	+ 3.9
27	+ 0	77	+ 5.9	27	+ 0	77	+ 5.9	27	+ 3.8
28	+ 0	78	+ 6.1	28	+ 0	78	+ 6.6	28	- 6.1
29	+ 0	79	+ 6.5	29	+ 0	79	+ 7.0	29	+ 8.2
30	+ 0	80	+ 6.6	30	+ 0	80	+ 7.1	30	+ .2
31	+ 0	81	+ 6.5	31	+ 0	81	+ 6.9		
32	- 2.0	82	+ 6.5	32	+ 0	82	+ 6.9		Seq. 5
33	+ 0	83	+ 6.6	33	+ 0	83	+ 7.0		
34	+ 0	84	+ 2.4	34	+ 0	84	+ 7.0		
35	+ 0	85	+ 5.9	35	+ 0	85	+ 6.9		
36	+ 0	86	+ 6.1	36	+ 0	86	+ 6.9		
37	+ 0	87	+ 6.3	37	+ 0	87	+ 8.4		
38	+ 0	88	+ 1.1	38	+ 0	88	+ 7.2		
39	- 1.4	89	+ 6.0	39	+ 0	89	+ 6.9		
40	+ 0	90	+ 5.7	40	+ 0	90	+ 6.3		
41	+ 0	91	+ 5.8	41	+ 0	91	+ 6.4		
42	+ 0	92	+ .4	42	+ 0	92	+ 7.6		
43	+ 0	93	+ 5.9	43	+ 0	93	+ 6.2		
44	+ 0	94	+ 5.8	44	+ 0	94	+ 6.0		
45	- .1	95	+ 5.6	45	+ 0	95	+ 5.6		
46	- .1	96	+ 5.7	46	+ 0	96	+ 5.8		
47	- .1	97	+ 5.7	47	+ 0	97	+ 6.0		
48	- .1	98	+ .1	48	+ 0	98	+ 6.2		
49	+ 0	99	+ .1	49	+ 0	99	+ 6.5		
50	+ 0	100	+ .2	50	+ 0	100	+ .1		

1997 .05   0°   .03   0   10.0   +2.5°   1.048   2015.6   .002276

a)				b)				c)	
1 + 0	51 + .1			1 + 0	51 + .1			1 + .2	
2 + 0	52 + 1.6			2 + 0	52 + 1.3			2 +23.9	
3 + 0	53 + .7			3 - .1	53 + .2			3 +20.0	
4 - 5.0	54 +32.2			4 - .1	54 + 6.5			4 +20.0	
5 - 1.2	55 +31.2			5 - .1	55 +15.5			5 +21.5	
6 + .1	56 +29.5			6 - .1	56 +14.5			6 +19.4	
7 + .1	57 +29.4			7 - .1	57 +25.9			7 +13.5	
8 + .1	58 +29.8			8 - .1	58 +29.0			8 +17.8	
9 + .1	59 +29.3			9 - .1	59 +29.2			9 +33.1	
10 - 3.6	60 +29.3			10 + 0	60 +29.2			10 +45.5	
11 - 5.0	61 +29.0			11 + 5.2	61 +29.2			11 +16.0	
12 - 1.1	62 +28.7			12 - .1	62 +29.5			12 + 6.4	
13 + .1	63 +29.7			13 - .1	63 +29.8			13 + 6.3	
14 + .1	64 +30.1			14 + .4	64 - 2.0			14 +11.1	
15 + .1	65 +30.3			15 - .1	65 - 2.8			15 +20.2	
16 + 1	66 +28.6			16 - .1	66 +12.9			16 +16.0	
17 + .1	67 +29.5			17 - .1	67 +29.5			17 +28.9	
18 - 5.2	68 +29.9			18 - .1	68 +29.6			18 +40.2	
19 - 1.2	69 +30.0			19 - .1	69 +29.0			19 +45.3	
20 + .1	70 +26.6			20 - .1	70 +29.0			20 + .1	
21 + .1	71 +28.7			21 - .1	71 +29.0			21 +13.1	
22 + .1	72 +29.1			22 - .1	72 +29.0			22 -10.4	
23 + .1	73 +29.5			23 - .1	73 +29.0			23 +.5	
24 - .1	74 +28.8			24 - 3.3	74 - .9			24 +12.3	
25 - 8.0	75 +29.9			25 + 0	75 - 4.0			25 -18.9	
26 - .6	76 +30.2			26 + .1	76 -10.2			26 +14.4	
27 + .1	77 +30.3			27 + .1	77 +11.8			27 +16.4	
28 + .1	78 +29.5			28 + .1	78 +34.0			28 +20.8	
29 + .1	79 +30.7			29 + .1	79 +30.1			29 +33.3	
30 + .1	80 +30.9			30 + .1	80 +30.2			30 + .1	
31 + .2	81 +30.9			31 + .1	81 +30.6				
32 - 8.4	82 +30.9			32 + .1	82 +30.8			Seq. 5	
33 + 0	83 +40.3			33 + .1	83 +30.9				
34 + 0	84 +13.8			34 - .1	84 +29.7				
35 + 0	85 +30.2			35 + .1	85 +29.7				
36 + .1	86 +30.2			36 - .1	86 +29.8				
37 + .1	87 +30.2			37 + .1	87 +28.2				
38 + .2	88 - 1.8			38 + .1	88 +29.1				
39 - 8.3	89 +33.8			39 + .1	89 +29.2				
40 + .1	90 +29.3			40 + .1	90 +29.2				
41 + .1	91 +30.0			41 + .1	91 +29.3				
42 + .1	92 + 2.3			42 + .1	92 +31.8				
43 + .2	93 +30.3			43 + .1	93 +27.6				
44 + .2	94 +30.3			44 + .1	94 +28.3				
45 + .3	95 +29.9			45 + .1	95 +28.6				
46 + .1	96 +29.9			46 + 0	96 +28.9				
47 + .1	97 +29.9			47 + 0	97 +29.1				
48 + .1	98 + .3			48 + 0	98 +29.0				
49 + .1	99 + .4			49 - .1	99 +29.4				
50 + .1	100 + .2			50 + 0	100 + .2				

```
1998  .05   0°   .03   0   10.0   0°   1.048   2015.6   .002276
```

a)
1	−	.1	51	+	.2

a)
```
a)1 -   .1      51 +   .2      b)1 +  0      51 +   .1      c)1 +   .1
  2 -   .1      52 +   .8        2 +  0      52 +   .7        2 +21.9
  3 -   .1      53 +   .2        3 +  0      53 +   .1        3 +17.4
  4 - 8.3       54 +32.7         4 -    .1   54 +   .1        4 +18.3
  5 - 1.2       55 +32.7         5 -    .1   55 - 1.3         5 +21.5
  6 + 0         56 +32.3         6 -    .1   56 + 1.7         6 +28.8
  7 + 0         57 +31.6         7 -    .1   57 +27.3         7 +24.0
  8 + 0         58 +31.6         8 -    .1   58 +30.9         8 +32.5
  9 + 0         59 +31.6         9 -    .1   59 +30.6         9 +45.3
 10 + 0         60 +31.6        10 -    .1   60 +30.6        10 +52.2
 11 - 7.8       61 +31.6        11 - 5.2     61 +30.8        11 +23.5
 12 - 1.2       62 +31.4        12 +  0      62 +31.5        12 +19.1
 13 -  .8       63 +31.5        13 +  0      63 +31.8        13 +18.2
 14 + 0         64 +31.7        14 - 5.0     64 - 1.2        14 +19.9
 15 + 0         65 +31.9        15 +  0      65 - 3.0        15 +28.9
 16 + 0         66 +30.9        16 +  0      66 +17.2        16 +22.3
 17 + 0         67 +30.9        17 +  0      67 +32.0        17 +30.7
 18 - 8.2       68 +31.0        18 +  0      68 +31.0        18 +46.1
 19 -  .8       69 +31.4        19 +  0      69 +30.6        19 +55.5
 20 + 0         70 +29.1        20 +  0      70 +30.6        20 -   .3
 21 + 0         71 +30.1        21 +  0      71 +30.6        21 +21.4
 22 + 0         72 +30.5        22 +  0      72 +30.7        22 +17.3
 23 + 0         73 +30.7        23 +  0      73 +30.8        23 +17.6
 24 + 0         74 +30.2        24 - 2 9     74 - 1.7        24 +22.4
 25 - 8.0       75 +30.4        25 +  0      75 - 4.5        25 +26.0
 26 -  .9       76 +30.7        26 +  0      76 +12.3        26 +22.7
 27 + 0         77 +31.0        27 +  0      77 -32.3        27 +27.0
 28 + 0         78 +31.1        28 +  0      78 +31.3        28 -38.3
 29 + 0         79 +31.1        29 +  0      79 +31.3        29 +44.5
 30 + 0         80 +31.3        30 +  0      80 +31.3        30 +   .2
 31 + 0         81 +31.5        31 +  0      81 +31.3
 32 - 8.3       82 +31.5        32 - 0       82 +31.6      Seq. 5
 33 -  .8       83 +32.4        33 + 0       83 +31.7
 34 + 0         84 +14.8        34 + 0       84 +31.5
 35 + 0         85 +31.2        35 + 0       85 +31.5
 36 + 0         86 +31.3        36 + 0       86 +31.5
 37 + 0         87 +31.5        37 + 0       87 +32.3
 38 + 0         88 - 2.3        38 + 0       88 +32.3
 39 - 7.9       89 +33.1        39 + 0       89 +31.8
 40 -  .1       90 +29.6        40 + 0       90 +31.8
 41 -  .1       91 +30.5        41 + 0       91 +31.8
 42 -  .1       92 + 2.2        42 + 0       92 +32.8
 43 -  .1       93 +31.1        43 + 0       93 +30.5
 44 -  .1       94 +31.1        44 + 0       94 +30.8
 45 -  .1       95 +31.1        45 + 0       95 +30.9
 46 -  .1       96 +31.1        46 + 0       96 +30.9
 47 -  .1       97 +31.1        47 + 0       97 +31.0
 48 -  .1       98 +  .2        48 + 0       98 +31.0
 49 -  .1       99 +  .3        49 + 0       99 +31.0
 50 -  .1      100 +  .2        50 + 0      100 +  .1
```

1999　.05　　0°　　.03　　0　　10.0　　-2.5?　　1.048　　2015.6　　.002276

a)				b)				c)	
1	+ 0	51	+ .2	1	- .1	51	+ .1	1	+ .1
2	+ 0	52	+ .8	2	- .1	52	+ .7	2	+22.6
3	+ 0	53	+ .1	3	- .1	53	+ .1	3	+18.7
4	- 8.5	54	+31.3	4	- .1	54	+ .7	4	-19.0
5	+ 0	55	+32.3	5	- .1	55	- 1.6	5	+21.1
6	+ 0	56	+31.9	6	- .1	56	- 5.2	6	+28.5
7	+ 0	57	+30.0	7	- .1	57	-20.8	7	+24.5
8	+ 0	58	+29.4	8	- .1	58	+38.4	8	+29.0
9	+ 0	59	+30.6	9	- .1	59	+31.2	9	+41.8
10	+ .1	60	+30.8	10	- .1	60	+30.8	10	+49.5
11	- 9.5	61	+30.8	11	- 4.4	61	+30.9	11	+21.4
12	+ 0	62	+30.2	12	+ 0	62	+31.4	12	+19.5
13	+ 0	63	+30.9	13	- .1	63	+31.9	13	+15.4
14	+ 0	64	+31.2	14	- 4.9	64	- 1.4	14	+19.1
15	+ 0	65	+31.3	15	+ .1	65	- 1.7	15	+29.4
16	+ 0	66	+27.9	16	+ .1	66	+19.3	16	-23.4
17	+ 0	67	+29.6	17	+ .1	67	+37.0	17	+35.0
18	- 9.5	68	+30.3	18	+ .1	68	+31.4	18	+40.1
19	+ 0	69	+30.7	19	+ .1	69	+28.3	19	+52.0
20	+ 0	70	+28.5	20	+ .1	70	+28.4	20	+ .3
21	+ 0	71	+29.1	21	+ .1	71	+28.9	21	+22.8
22	+ 0	72	+29.3	22	+ .1	72	+29.1	22	+19.1
23	+ 0	73	+29.5	23	+ .1	73	+29.6	23	+16.5
24	+ 0	74	+29.7	24	+ .1	74	+ 2.9	24	+20.8
25	- 7.2	75	+29.5	25	+ .1	75	+11.1	25	+25.9
26	- .5	76	+29.7	26	+ 0	76	+22.4	26	+21.4
27	+ 0	77	+30.0	27	+ 0	77	+28.1	27	+21.5
28	+ 0	78	+30.5	28	+ 0	78	+29.6	28	+33.9
29	+ 0	79	+30.7	29	+ 0	79	+30.0	29	+46.0
30	+ 0	80	+30.7	30	+ 0	80	+30.1	30	+ .1
31	+ 0	81	+30.7	31	+ 0	81	+30.2		
32	- 5.8	82	+30.7	32	+ 0	82	+30.3	Seq. 5	
33	- 1.1	83	+30.5	33	+ 0	83	+30.5		
34	+ 0	84	+13.9	34	+ 0	84	+30.5		
35	+ 0	85	+29.8	35	+ 0	85	+30.8		
36	+ 0	86	+29.9	36	- 1.2	86	+30.9		
37	+ 0	87	+30.4	37	+ .1	87	+42.2		
38	+ 0	88	+ 5.3	38	- .1	88	+32.1		
39	- 4.1	89	+29.0	39	- .1	89	+31.3		
40	+ 0	90	+29.2	40	- .1	90	+31.3		
41	+ 0	91	+29.5	41	- .1	91	+31.3		
42	+ 0	92	+ 1.7	42	- .1	92	+35.2		
43	+ 0	93	+30.0	43	- .1	93	+29.9		
44	+ 0	94	+29.6	44	- .1	94	+30.2		
45	+ 0	95	+29.7	45	- .1	95	+30.3		
46	+ 0	96	+29.8	46	- .1	96	+30.4		
47	+ 0	97	+29.9	47	- .1	97	+30.4		
48	+ 0	98	+ .2	48	- .1	98	+30.5		
49	+ 0	99	+ .2	49	- .1	99	+30.0		
50	+ 0	100	+ .2	50	- .1	100	+ .2		

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2015    .0    0°    .01    0    10.0    0°    1.010    2019.8    .002170
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a)				b)				c)	
1 − .1	51 + .1			1 + 0	51 + .1			1 + .1	
2 − .1	52 + 1.1			2 + 0	52 + 1.3			2 +11.9	
3 − .1	53 + .1			3 + 0	53 + .5			3 +11.6	
4 − 2.8	54 +15.8			4 + 0	54 + 1.8			4 +11.6	
5 + .1	55 +15.1			5 + 0	55 + .2			5 +10.6	
6 + .1	56 −13.5			6 + 0	56 − 1.3			6 +10.7	
7 + 0	57 +13.4			7 + 0	57 + 9.5			7 +12.1	
8 + 0	58 +14.2			8 − .1	58 +14.3			8 +12.5	
9 + 0	59 +13.5			9 − .1	59 −13.7			9 +13.7	
10 + 3.6	60 +13.2			10 − .1	60 −13.6			10 +13.9	
11 − 2.7	61 +13.2			11 − 2.0	61 +13.5			11 +13.0	
12 + 0	62 +13.6			12 + .1	62 +13.7			12 +11.0	
13 + 0	63 +13.8			13 + .1	63 +13.9			13 +11.9	
14 + 0	64 +14.2			14 − 1.4	64 + .9			14 +11.9	
15 + 0	65 +14.3			15 + 0	65 + .1			15 +12.1	
16 + 0	66 +14.1			16 + 0	66 − 6.7			16 +12.0	
17 + 0	67 −13 7			17 + .1	67 +13.1			17 +12.8	
18 − 2.3	68 +13.7			18 + .1	68 +13.6			18 +13.6	
19 + .1	69 +13.2			19 + 0	69 +13.5			19 +14.2	
20 + .1	70 +12.6			20 + 0	70 +13.1			20 + .1	
21 + .1	71 +12.8			21 − 0	71 +13.0			21 +10.1	
22 + .1	72 +12.9			22 + 0	72 +13.0			22 + 9.9	
23 + .1	73 +12.8			23 + 0	73 +13.0			23 +10.0	
24 + .1	74 +13.0			24 − 1.5	74 + .2			24 +10.1	
25 − 2.5	75 +13.1			25 + 0	75 − 1.5			25 +10.2	
26 + 0	76 +13.0			26 + .2	76 − 5.9			26 +10.5	
27 + .2	77 +13.2			27 + .2	77 +12.8			27 + .7	
28 + .2	78 +13.3			28 + .2	78 +13.3			28 +11.0	
29 + .2	79 +13.4			29 + .2	79 +13.5			29 +10.9	
30 + .2	80 +13.6			30 + .2	80 +13.8			30 − .1	
31 + .2	81 +13.6			31 + .2	81 +13.7				
32 − 2.7	82 +13.6			32 + 0	82 −13.7			Seq. 5	
33 + 0	83 +13.7			33 + 0	83 −13.8				
34 + 0	84 + 6.3			34 + 0	84 +13.6				
35 + 0	85 +13.0			35 + 0	85 −13.5				
36 + 0	86 +13.0			36 − 0	86 +13.5				
37 + 0	87 +13.4			37 + 0	87 −13.6				
38 + 0	88 + .2			38 + 0	88 +14.0				
39 − 2.3	89 −13.0			39 + 0	89 +13.7				
40 + 0	90 +12.9			40 + 0	90 +13.2				
41 + 0	91 +13.0			41 + 0	91 +13.1				
42 + 0	92 + 1 3			42 + 0	92 +13.2				
43 + 0	93 +12.8			43 − .1	93 +13.3				
44 + 0	94 +12.7			44 − .1	94 +13.0				
45 + 0	95 +12.6			45 − .1	95 +12.0				
46 + 0	96 +12.6			46 − .1	96 +12.5				
47 + 0	97 +12.7			47 − .1	97 +12.7				
48 + 0	98 + .5			48 − .1	98 +13.0				
49 + 0	99 + .7			49 − .1	99 +13.4				
50 − .1	100 + .1			50 − .1	100 + .1				

```
2016   .05   0°   .01   0   10.0   0°   1.048   2019.8   .002246

a)1 +  .1      51 +  .1       b)1 + 0       51 +  .2       c)1 +  .1
  2 +  .1      52 + 1.0         2 + 0       52 + 1.0         2 +61.6
  3 +  .1      53 +  .1         3 + 0       53 +  .1         3 +58.6
  4 -13.9      54 +64.1         4 + 0       54 - 2.1         4 +58.6
  5 +  .1      55 +64.0         5 -  .1     55 -10.7         5 +59.5
  6 +  .1      56 +62.3         6 -  .1     56 -14.7         6 +62.4
  7 +  .1      57 +62.2         7 -  .1     57 +47.3         7 +62.1
  8 +  .1      58 +62.3         8 -  .1     58 +61.8         8 +64.9
  9 +  .1      59 +62.4         9 -  .1     59 +62.0         9 +71.4
 10 + 1.6      60 +62.5        10 -  .1     60 +62.0        10 +74.8
 11 -14.1      61 +62.5        11 -10.1     61 +62.0        11 +60.9
 12 +  .1      62 +62.5        12 + 0       62 +62.3        12 +59.3
 13 +  .1      63 +62.6        13 + 0       63 +62.6        13 +59.5
 14 +  .1      64 +62.8        14 - 8.9     64 - 3.6        14 +60.0
 15 +  .1      65 +62.9        15 + 0       65 -10.6        15 +64.4
 16 +  .1      66 +62.8        16 + 0       66 -29.1        16 +61.6
 17 +  .1      67 +62.8        17 + 0       67 +61.8        17 +64.9
 18 -14.5      68 +62.8        18 + 0       68 +61.8        18 +71.0
 19 +  .2      69 +62.8        19 + 0       69 +60.8        19 +77.2
 20 +  .2      70 +62.0        20 + 0       70 +61.8        20 +  .2
 21 +  .2      71 +61.9        21 + 0       71 +61.8        21 +60.1
 22 +  .2      72 +62.0        22 + 0       72 +61.8        22 +57.1
 23 +  .2      73 +62.0        23 + 0       73 +61.9        23 +57.1
 24 +  .2      74 +62.0        24 - 7.1     74 - 3.3        24 +58.0
 25 -14.1      75 +62.1        25 + 0       75 -11.1        25 +60.5
 26 +  .2      76 +62.3        26 -  .1     76 -23.9        26 +60.0
 27 +  .2      77 +62.5        27 -  .1     77 +61.4        27 +56.1
 28 +  .2      78 +62.6        28 -  .1     78 +61.8        28 +67.0
 29 +  .2      79 +62.6        29 -  .1     79 +62.1        29 +65.4
 30 +  .2      80 +62.6        30 -  .1     80 +62.4        30 +  .1
 31 +  .2      81 +62.6        31 -  .1     81 +62.5
 32 -13.4      82 +62.6        32 -  .1     82 +62.5       Seq. 5
 33 +  .3      83 +62.7        33 -  .1     83 +62.5
 34 +  2       84 +33.1        34 -  .1     84 +62.6
 35 +  .2      85 +62.6        35 -  .1     85 +62.6
 36 +  .2      86 +62.6        36 -  .1     86 +62.6
 37 +  .2      87 +62.6        37 -  .1     87 +62.6
 38 +  .2      88 - 6.3        38 -  .1     88 +62.7
 39 -13.8      89 +62.7        39 -  .1     89 +62.8
 40 +  .1      90 +61.9        40 -  .1     90 +62.8
 41 +  .1      91 +62.0        41 -  .1     91 +62.8
 42 +  .1      92 + 5.7        42 -  .1     92 +62.8
 43 +  .1      93 +62.6        43 -  .1     93 +62.7
 44 +  .1      94 +61.7        44 -  .1     94 +62.7
 45 +  .1      95 +62.5        45 -  .1     95 +62.7
 46 +  1       96 +62.4        46 -  .1     96 +62.6
 47 +  .1      97 +62.4        47 -  .1     97 +62.6
 48 +  .1      98 +  .3        48 -  .1     98 +62.6
 49 +  .1      99 +  .6        49 -  .1     99 +62.6
 50 +  .1     100 +  .1        50 -  .1    100 +  .1
```

2035　.10　60°　.25　0　10.0　+2.5°　1.155　2036.1　.002431

a)				b)				c)	
1 + 0	51 + .2			1 + .1	51 + .2			1 + .2	
2 + .2	52 + 4.1			2 + .6	52 + 3.7			2 + 5.8	
3 + 0	53 + 2.3			3 + 0	53 + 2.2			3 + 2.7	
4 - 1.3	54 +30.6			4 + .8	54 +11.0			4 + 2.4	
5 - 1.5	55 +29.6			5 + 1.0	55 +11.0			5 + 4.3	
6 + .1	56 +27.0			6 + 1.1	56 + 9.3			6 +14.4	
7 + .1	57 +28.2			7 + 1.5	57 +12.2			7 +29.4	
8 + .1	58 +28.1			8 - 2.7	58 +12.4			8 +33.2	
9 + .1	59 +23.7			9 + 3.9	59 +12.4			9 +51.9	
10 - 5.5	60 +23.4			10 + 4.0	60 +12.7			10 +71.4	
11 - .9	61 +24.9			11 +15.3	61 +14.8			11 +12.7	
12 - .9	62 +24.8			12 + 0	62 +18.4			12 + 9.2	
13 + .1	63 -18.6			13 + 1.5	63 +20.0			13 + 9.9	
14 + .1	64 +19.6			14 + 5.0	64 + 5.4			14 +10.2	
15 + .1	65 -26.7			15 + .2	65 + 5.4			15 +15.8	
16 + .1	66 +20.9			16 + .4	66 - 5.8			16 +29.6	
17 + .1	67 +14.7			17 + .4	67 + 8.2			17 +33.5	
18 - .4	68 +16.0			18 + 5	68 +14.9			18 +44.5	
19 - .4	69 +25.0			19 + .6	69 +20.6			19 +61.4	
20 - .5	70 +17.2			20 + .3	70 +29.6			20 + .1	
21 + .1	71 +10.0			21 + .4	71 +29.7			21 +21.6	
22 + .1	72 +16.5			22 + .4	72 +29.9			22 +19.5	
23 + .2	73 +25.4			23 + .6	73 -28.3			23 +19.0	
24 + .4	74 +20.0			24 + .8	74 + 3.9			24 +19.7	
25 + 0	75 -12.5			25 + .5	75 + 3.0			25 +21.5	
26 - .2	76 +18.2			26 + .5	76 2.8			26 +29.5	
27 - .3	77 +26.5			27 + .5	77 + 3.6			27 +28.6	
28 + .1	78 +18.8			28 + .5	78 - 5.6			28 +41.4	
29 + .1	79 +12.1			29 + .5	79 - 9.2			29 +44.4	
30 + .1	80 +17.8			30 + .5	80 +21.1			30 + .1	
31 + .1	81 -26.1			31 + .5	81 +30.1				
32 - .3	82 -20.7			32 + .5	82 -30.9			Seq. 5	
33 - .6	83 + 5.7			33 + .5	83 -31.1				
34 + .2	84 + 7.8			34 - .5	84 -25.7				
35 + .2	85 +30.2			35 + .5	85 -26.9				
36 + 2	86 +28.5			36 + .2	86 +27.9				
37 + .2	87 +28.5			37 + 4	87 +21.2				
38 + .2	88 - 3.8			38 + .3	88 +17.0				
39 - .2	89 + 3.8			39 + .5	89 +13.7				
40 - .8	90 -19.9			40 + 0	90 +21.9				
41 + .1	91 -31.1			41 + .1	91 +27.0				
42 + .1	92 - 2.5			42 - .1	92 +20.5				
43 + .1	93 -25.8			43 + .1	93 +27.2				
44 + .1	94 -27.1			44 + .1	94 +24.2				
45 + .1	95 +27.3			45 + 1	95 +23.8				
46 + 0	96 -27.5			46 + .1	96 +25.8				
47 + 0	97 -22.5			47 + 1	97 +26.0				
48 + 0	98 - 2.4			48 + 1	98 +26.4				
49 + 0	99 + 1.9			49 + 0	99 +27.9				
50 + 0	100 + .2			50 + 0	100 + .2				

2036 .10 60° .25 0 10.0 0° 1.155 2036.1 .002431

a)
1	-	.1	51 +	.2
2	-	.4	52 +	5.0
3	+	.1	53 ·	1.7
4	+	.1	54 ·	25.8
5	+	.1	55 ·	22.4
6	+	.3	56 ·	23.0
7	+	.1	57 +	30.7
8	+	.2	58 ·	23.9
9	+	.3	59 ·	19.6
10	+	1.8	60 ·	22.2
11	+	0	61 ·	26.9
12	+	0	62 ·	24.3
13	+	0	63 ·	20.5
14	+	.1	64 +	24.2
15	+	.5	65 ·	28.9
16	+	2	66 ·	25.0
17	+	.4	67 ·	19.7
18	+	0	68 ·	22.7
19	+	0	69 ·	27.4
20	+	0	70 ·	23.2
21	+	.1	71 ·	19.6
22	-	.3	72 ·	22.0
23	·	.6	73 ·	27.1
24	·	.7	74 ·	25.1
25	+	.4	75 ·	21.2
26	+	.2	76 ·	23.9
27	+	.2	77 ·	28.2
28	-	.3	78 ·	25.1
29	+	:5	79 ·	21.8
30	+	.5	80 ·	23.9
31	·	.7	81 ·	28.2
32	+	0	82 ·	21.8
33	+	0	83 ·	15.6
34	+	0	84 ·	10.9
35	-	.2	85 ·	27.2
36	-	.2	86 ·	24.2
37	+	.4	87 ·	27.7
38	-	.4	88 ·	6.3
39	+	.2	89 ·	16.3
40	+	0	90 ·	27.7
41	+	.1	91 ·	25.3
42	·	.1	92 ·	1.8
43	·	.3	93 ·	26.8
44	+	.4	94 ·	23.7
45	+	.5	95 ·	25.3
46	+	0	96 ·	26.7
47	+	0	97 ·	20.8
48	+	0	98 ·	1.5
49	+	0	99 ·	1.7
50	+	0	100 +	1

b)
1	-	.1	51 ·	.1
2	-	.1	52 +	5 0
3	-	.1	53 +	1.4
4	-	.1	54 +	6.5
5	-	.1	55 +	8.2
6	-	.1	56 +	5.7
7	-	.1	57 ·	12.8
8	-	1	58 ·	17.2
9	·	0	59 ·	20.9
10	+	.2	60 ·	24.9
11	+	2.0	61 ·	28.6
12	-	.1	62 ·	29.0
13	+	.2	63 ·	27.3
14	·	2.2	64 ·	5.6
15	-	.1	65 +	7.2
16	·	0	66 +	9.6
17	·	0	67 ·	14.1
18	·	.1	68 -	19.3
19	+	1	69 ·	23.6
20	·	0	70 -	28.1
21	+	0	71 ·	28.6
22	+	0	72 ·	27.5
23	+	.8	73 ·	24.0
24	+	3.8	74 ·	4.8
25	·	0	75	0.7
26	+	.1	76 ·	10.1
27	+	.1	77 ·	15.2
28	+	.1	78 ·	20.0
29	·	.1	79 ·	24.1
30	·	.2	30 +	27.9
31	·	0	81 ·	26.2
32	-	.1	82 ·	24.4
33	-	.1	83 ·	23.1
34	-	.1	84 ·	23.6
35	·	0	85 ·	26.2
36	+	0	86 ·	27.4
37	·	.4	87 ·	14.6
38	·	4	88 ·	28.5
39	-	.6	89 ·	27.6
40	-	.1	90 ·	23.9
41	-	.1	91 ·	26.8
42	-	.1	92 ·	14.7
43	-	.1	93 ·	27.2
44	-	.1	94 ·	26.5
45	-	.1	95 ·	23.4
46	-	.1	96 ·	26.6
47	-	.1	97 ·	23.8
48	-	.1	98 ·	26.6
49	-	.1	99 ·	28.0
50	-	.1	100 +	.2

c)
1	+	.2
2	+	10.6
3	+	8.3
4	+	8.4
5	+	9.3
6	+	15.7
7	+	28 4
8	+	31.5
9	+	46.1
10	+	60.5
11	+	14.6
12	+	11.3
13	·	11.8
14	+	11.7
15	·	15.6
16	+	29.1
17	-	35.1
18	+	45.8
19	+	61.1
20	·	.1
21	·	7.5
22	·	6.4
23	+	5.7
24	·	7.6
25	+	13.0
26	+	26.7
27	+	28.5
28	+	44.7
29	·	50.8
30	+	.1

Seq. 5

```
2037  .10  60°  .25  0  10.0  -2.5°  1.155  2036.1  .002431
```

a)				b)				c)	
1	+ .1	51	+ .1	1	- .1	51	+ .1	1	+ .1
2	+ .2	52	+ 5.1	2	+ .1	52	+ 5.1	2	+22.5
3	+ .2	53	+ 1.8	3	- .1	53	+ 1.5	3	+21.8
4	+ 0	54	+21.4	4	+ 0	54	+ 4.6	4	+21.7
5	+ 0	55	+14.0	5	+ .2	55	+ 5.0	5	+21.7
6	+ 0	56	+19.5	6	+ .2	56	+ 2.4	6	+23.5
7	+ .1	57	-30.4	7	+ .3	57	+ 5.6	7	+30.1
8	+ .1	58	+18.5	8	+ .3	58	+ 5.0	8	-33.3
9	+ .2	59	-10.5	9	+ .3	59	+ 7.8	9	+42.6
10	+ 1.3	60	+18.7	10	- .3	60	-14.8	10	+53.8
11	+ 0	61	+27.4	11	- .4	61	-29.5	11	+12.3
12	+ 0	62	-18.4	12	+ 0	62	+32.6	12	+ 8.2
13	+ 0	63	-11.0	13	+ .4	63	+32.9	13	+ 8.9
14	+ 0	64	+20.7	14	+ .6	64	+ 4.2	14	- 9.5
15	+ .1	65	-28.9	15	+ .6	65	+ 4.9	15	+14.7
16	- .2	66	-19.6	16	+ .6	66	+ 6.0	16	-30.4
17	+ .2	67	-12.6	17	- .6	67	+ 8.2	17	+34.6
18	+ .1	68	-17.0	18	- .6	68	+13.8	18	+45.7
19	+ .1	69	-26.3	19	+ .5	69	+20.0	19	+62.8
20	+ .1	70	+22.0	20	+ .4	70	+28.5	20	+ .1
21	+ .1	71	-16.3	21	+ .4	71	+30.2	21	+ 4.4
22	- .1	72	-17.8	22	+ 1.0	72	-30.3	22	- 1.5
23	- .1	73	-25.7	23	+ 2.2	73	+28.3	23	- 1.6
24	+ .2	74	-27.1	24	+ 7.0	74	- 7.8	24	+ 4.6
25	+ 0	75	+23.5	25	- .1	75	+ 8.6	25	-13.4
26	+ 0	76	+23.8	26	- .3	76	-10.3	26	+29.6
27	+ 0	77	-26.1	27	+ .5	77	+11.2	27	-32.3
28	- 0	78	-29.6	28	+ .8	78	+12.4	28	+52.7
29	+ .1	79	-26.7	29	+ 1.0	79	+13.5	29	+59.9
30	+ .3	80	+25.9	30	+ 2.7	80	-15.6	30	+ .1
31	- .3	81	-27.0	31	+ 1.0	81	+18.8		
32	+ .2	82	-20.4	32	+ .9	82	+20.8	Seq. 5	
33	+ .1	83	+20.9	33	+ .9	83	+22.3		
34	+ 0	84	-10.3	34	+ .9	84	+28.2		
35	+ 0	85	-22.2	35	+ 1.0	85	+28.8		
36	+ 0	86	+23.3	36	+ 1.9	86	+29.2		
37	+ .1	87	+27.8	37	+ 2.5	87	- 4.2		
38	+ .1	88	+14.7	38	+ 3.1	88	+34.2		
39	+ 0	89	+19.6	39	+ 3.7	89	+21.4		
40	+ 0	90	+12.7	40	- .1	90	+29.3		
41	+ 0	91	+16.0	41	- .1	91	+29.7		
42	+ 0	92	+ 1.7	42	- .1	92	+ 5.9		
43	+ 0	93	+27.8	43	- .1	93	+26.2		
44	+ .2	94	+25.1	44	- .1	94	+33.2		
45	+ .3	95	+26.6	45	- .1	95	+27.6		
46	+ .1	96	+28.5	46	- .1	96	+28.0		
47	+ .1	97	+21.8	47	- .1	97	+26.9		
48	+ .1	98	+ 1.4	48	- .1	98	+27.1		
49	+ .1	99	+ 1.6	49	- .1	99	+29.4		
50	+ .1	100	+ .1	50	- .1	100	+ .1		

2078 .10 60° .1? 0   10.0 +5.0° 1.154   2031.8 .002370

a)			b)			c)	
1 + 0	51 + .2		1 + 0	51 + .1		1 + .1	
2 + 0	52 + 2.0		2 + 0	52 + 2.0		2 + 4.3	
3 - .4	53 + 1.3		3 + 0	53 + 1.0		3 + 3.0	
4 - 1.?	54 +39.5		4 + 0	54 +13.6		4 + 2.1	
5 - 1.7	55 +34.6		5 + .5	55 +15.7		5 + 3.7	
6 + 0	56 +33.0		6 + .7	56 +15.6		6 +15.9	
7 + 0	57 +34.6		7 + .8	57 +20.4		7 +32.8	
8 + 0	58 +34.7		8 + 1.6	58 +21.0		8 +37.5	
9 + 0	59 +29.1		9 + 3.4	59 +21.7		9 +60.4	
10 + 3.2	60 +29.0		10 + 3.6	60 +22.5		10 +63.7	
11 - 1.7	61 +31.1		11 +16.1	61 +25.5		11 +16.2	
12 - 1.7	62 +29.6		12 + .1	62 +27.4		12 +13.3	
13 + 0	63 +25.9		13 + .2	63 +28.7		13 +13.3	
14 + 0	64 +28.3		14 + 6.1	64 + 4.7		14 +13.1	
15 + 0	65 +32.5		15 + .2	65 + 4.5		15 +16.1	
16 + 0	66 +27.9		16 + 0	66 + 5.0		16 +29.7	
17 + 0	67 +21.6		17 + 0	67 +13.2		17 +34.9	
18 - 1.4	68 +29.1		18 + 0	68 +26.7		18 +45.8	
19 - 1.3	69 +32.0		19 - 0	69 +38.6		19 +63.5	
20 - 1	70 +26.0		20 + 0	70 +41.1		20 + .1	
21 - .1	71 +25.4		21 + 0	71 +39.5		21 +30.0	
22 - .1	72 +31.0		22 + 0	72 +34.4		22 +29.8	
23 - .1	73 +32.7		23 + 0	73 +32.3		23 +28.9	
24 - .1	74 +25.8		24 + 0	74 + 1.8		24 +28.9	
25 - .9	75 +25.8		25 + 0	75 + .4		25 +29.0	
26 - .9	76 +31.9		26 + 0	76 + .4		26 +32.1	
27 + 0	77 +33.6		27 + 0	77 + .6		27 +30.1	
28 + 0	78 +22.7		28 + 0	78 + .9		28 +39.8	
29 + 0	79 +27.1		29 + 0	79 + 7.8		29 +39.8	
30 + 0	80 +32.9		30 + 0	80 +35.8		30 + .1	
31 + 0	81 +34.3		31 + 0	81 +40.2			
32 - 1.3	82 +29.3		32 + 0	82 +40.5		Seq.5	
33 - 1.3	83 + 5.0		33 + 0	83 +39.7			
34 + 0	84 +13.6		34 + 0	84 +35.9			
35 + 0	85 +32.5		35 + 0	85 +35.8			
36 + 0	86 +32.9		36 + 0	86 +35.9			
37 - .1	87 +33.9		37 + 0	87 +23.0			
38 - .1	88 + 2.4		38 + 0	88 +26.5			
39 - 2.3	89 + .9		39 + 0	89 +20.4			
40 - 2.0	90 +39.0		40 + 0	90 +29.9			
41 + 0	91 +37.5		41 + 0	91 +33.3			
42 + 0	92 + 2.5		42 + 0	92 +29.0			
43 - .1	93 +32.6		43 + 0	93 +29.0			
44 - .1	94 +33.7		44 + 0	94 +27.9			
45 - .1	95 +34.0		45 + 0	95 +29.9			
46 - .1	96 +34.6		46 + 0	96 +33.4			
47 - .1	97 +28.6		47 + 0	97 +33.7			
48 - .1	98 + 2.3		48 + 0	98 +34.3			
49 - .1	99 + 1.7		49 + 0	99 +35.0			
50 - .1	100 + .1		50 + 0	100 + .2			

2079 .10 ⌒00° .15 0 10.0 +2.5° 1.155 2031.8 .002370

a)				b)				c)	
1 + 0		51 + .1		1 + 0		51 + .1		1 + .1	
2 + 0		52 + 1.7		2 + 0		52 + 1.5		2 + 9.7	
3 - .1		53 + .2		3 + 0		53 + 1.1		3 + 8.8	
4 - .9		54 +38.0		4 + 0		54 +10.3		4 + 8.2	
5 - .9		55 +36.5		5 + 0		55 +14.3		5 + 8.7	
6 + 0		56 +34.5		6 + 0		56 +14.5		6 +17.7	
7 + 0		57 +35.4		7 + 0		57 +22.1		7 +33.5	
8 - .1		58 +35.4		8 + .2		58 +23.9		8 +37.4	
9 - .1		59 +30.9		9 + 1.4		59 +25.2		9 +56.3	
10 + 3.7		60 +30.8		10 + 1.1		60 +26.0		10 +74.5	
11 - .5		61 +32.2		11 +11.1		61 +27.1		11 +22.2	
12 - .6		62 +32.3		12 - .1		62 +28.2		12 +18.1	
13 + 0		63 +30.7		13 + .2		63 +28.8		13 +18.1	
14 + 0		64 +31.0		14 + 4.0		64 + 6.3		14 +16.7	
15 + 0		65 +33.5		15 + 1.0		65 + 6.0		15 +20.2	
16 + 0		66 +31.4		16 + .8		66 + 8.3		16 +34.0	
17 + 0		67 +28.9		17 + .8		67 +17.2		17 +39.0	
18 - .9		68 +29.9		18 + .7		68 +26.3		18 +50.4	
19 - 1.0		69 +32.7		19 + .7		69 +31.3		19 +66.4	
20 - .1		70 +27.8		20 + .6		70 +33.3		20 + .2	
21 - .1		71 +27.8		21 + .2		71 +33.6		21 +28.7	
22 - .1		72 +30.3		22 + .2		72 +33.4		22 +28.1	
23 - .1		73 +33.0		23 + .2		73 +31.6		23 +28.0	
24 - .1		74 +29.5		24 + .2		74 + 3.5		24 +28.0	
25 - .8		75 +29.5		25 + 0		75 + 2.0		25 +28.3	
26 - .9		76 +31.3		26 + 0		76 + 2.0		26 +34.3	
27 - .1		77 +33.6		27 + 0		77 + 6.2		27 +34.3	
28 - .1		78 +28.2		28 + 0		78 +15.1		28 +46.1	
29 - .1		79 +28.3		29 + 0		79 +27.6		29 +49.5	
30 - .1		80 +31.3		30 + .5		80 +37.2		30 + .2	
31 - .1		81 +33.5		31 + .5		81 +37.6			
32 - 1.1		82 +31.2		32 + 0		82 +37.7		Seq. 5	
33 - 1.1		83 +17.1		33 + 0		83 +37.4			
34 - .1		84 +15.3		34 - .1		84 +33.0			
35 - .1		85 +32.4		35 - .1		85 +33.6			
36 - .1		86 +32.9		36 - .1		86 +34.0			
37 - .1		87 +33.6		37 - .1		87 +29.0			
38 - .1		88 + 3.1		38 - .1		88 +29.0			
39 - .7		89 + 8.7		39 - .1		89 +28.8			
40 - .8		90 +37.2		40 - .1		90 +29.6			
41 - .1		91 +34.1		41 - .1		91 +33.0			
42 - .1		92 + 2.8		42 - .1		92 +27.5			
43 - .1		93 +32.5		43 - .1		93 +32.4			
44 - .1		94 +32.9		44 - .1		94 +30.5			
45 - .1		95 +33.1		45 - .1		95 +30.6			
46 - .1		96 +33.6		46 - .1		96 +32.8			
47 - .1		97 +27.2		47 - .1		97 +31.4			
48 - .1		98 + 1.9		48 - .1		98 +33.0			
49 - .1		99 + 1.6		49 - .1		99 +35.1			
50 - .1		100 + .1		50 - .1		100 + .2			

2080 .10 60° .15 0 10.0 0° 1.155 2031.8 .002370

a)			b)			c)	
1 + 0	51 + .2		1 + 0	51 + .2		1 + .2	
2 + .4	52 + 3.9		2 + 0	52 + 2.8		2 +18.9	
3 + 0	53 + 2.3		3 + 0	53 + 1.4		3 +18.4	
4 - 1.4	54 +35.2		4 + 0	54 + 4.8		4 +17.7	
5 - 1.4	55 +35.3		5 + .1	55 + 7.6		5 +17.7	
6 + 0	56 +35.9		6 + .1	56 + 7.8		6 +21.0	
7 + .2	57 +39.5		7 + .1	57 +17.8		7 +31.7	
8 + .3	58 +35.9		8 + .1	58 +25.8		8 +35.5	
9 + .3	59 +34.5		9 + .3	59 +31.3		9 +49.1	
10 + 4.5	60 +34.8		10 + 0	60 +35.4		10 +63.4	
11 - .8	61 +36.5		11 + 3.2	61 +35.7		11 +24.1	
12 - .8	62 +35.8		12 + 0	62 +35.8		12 +22.7	
13 + 0	63 +35.2		13 + .2	63 +35.7		13 +22.3	
14 + 0	64 +36.4		14 + 3.9	64 + 6.8		14 +21.3	
15 + .2	65 +38.3		15 + .2	65 + 7.7		15 +22.4	
16 + .4	66 +35.5		16 + .1	66 +12.7		16 +33.4	
17 + .4	67 +34.7		17 + .3	67 +22.0		17 +39.3	
18 - 1.0	68 +35.4		18 + .3	68 +30.9		18 +47.9	
19 - 1.0	69 +37.1		19 + .3	69 +34.4		19 +63.4	
20 + 0	70 +32.6		20 + .1	70 +36.3		20 + .1	
21 + .1	71 +32.7		21 + .1	71 +36.6		21 +16.4	
22 + .2	72 +34.3		22 + .1	72 +35.4		22 +16.0	
23 + .2	73 +36.1		23 + .6	73 +34.6		23 +15.3	
24 + .3	74 +35.3		24 + 4.7	74 + 5.6		24 +15.5	
25 - .9	75 +35.0		25 + 0	75 + 6.0		25 +17.9	
26 - .9	76 +36.1		26 + .1	76 +12.3		26 +30.7	
27 + .3	77 +37.2		27 + .1	77 +21.0		27 +32.4	
28 + .3	78 +34.6		28 + .1	78 +28.1		28 +48.0	
29 + .3	79 +34.5		29 + .1	79 +33.4		29 +53.3	
30 + .3	80 +35.5		30 + .5	80 +35.8		30 + .1	
31 + .4	81 +37.3		31 + 0	81 +35.8			
32 - 1.4	82 +31.0		32 + 0	82 +35.1		Seq. 5	
33 - 1.1	83 +27.5		33 + 0	83 +35.1			
34 + .2	84 +16.3		34 + .1	84 +35.1			
35 + .2	85 +34.4		35 + 0	85 +35.1			
36 + .3	86 +34.7		36 + 0	86 +35.5			
37 + .4	87 +36.1		37 + .6	87 +26.9			
38 + .4	88 + 7.1		38 + .3	88 +34.0			
39 - .8	89 +24.2		39 + .6	89 +36.9			
40 - .8	90 +37.4		40 + 0	90 +35.2			
41 + .1	91 +35.5		41 + 0	91 +35.4			
42 + .1	92 + 3.0		42 + 0	92 +27.0			
43 + .3	93 +35.7		43 + 0	93 +36.0			
44 + .4	94 +35.9		44 + 0	94 +35.4			
45 + .4	95 +35.9		45 + 0	95 +35.2			
46 + 0	96 +36.2		46 + 0	96 +35.2			
47 + 0	97 +28.2		47 + 0	97 +35.0			
48 + 0	98 + 2.0		48 + 0	98 +35.2			
49 + 0	99 + 2.0		49 + 0	99 +35.9			
50 + 0	100 + .1		50 + 0	100 + .2			

2081   .10   60°   .15   0   10.0   -2.5°   1.154   2031.8   .002370

a)

#		val	#		val
1	-	.1	51	+	.2
2	+	.3	52	+	4.4
3	+	0	53	+	1.9
4	-	1.5	54	+	29.6
5	+	0	55	+	30.8
6	+	0	56	+	33.5
7	+	0	57	+	37.9
8	+	0	58	+	30.6
9	+	.1	59	+	30.5
10	+	.7	60	+	33.1
11	-	1.1	61	+	35.6
12	+	0	62	+	32.0
13	+	0	63	+	31.2
14	+	0	64	+	32.0
15	+	0	65	+	36.5
16	+	0	66	+	33.0
17	+	0	67	+	29.6
18	-	.6	68	+	31.7
19	-	7	69	+	34.4
20	+	...3	70	+	33.1
21	+	.3	71	+	29.2
22	+	.3	72	+	30.3
23	+	.3	73	+	33.9
24	+	.3	74	-	34.8
25	-	1.4	75	+	33.7
26	-	1.7	76	+	33.6
27	+	0	77	+	34.8
28	+	0	78	+	36.5
29	+	0	79	-	35.5
30	+	0	80	+	35.4
31	+	0	81	-	35.6
32	-	.1	82	+	31.5
33	-	.1	83	+	30.7
34	-	.1	84	+	14.7
35	-	.1	85	+	29.3
36	-	.1	86	+	31.0
37	-	.1	87	+	34.0
38	-	.1	88	+	14.7
39	▲	.1	89	+	26.5
40	-	.1	90	+	27.8
41	-	.1	91	+	28.4
42	-	.1	92	+	2.8
43	-	.1	93	+	34.8
44	-	.1	94	+	33.2
45	-	.1	95	+	33.4
46	-	.1	96	+	34.5
47	-	.1	97	+	27.7
48	-	.1	98	+	2.2
49	-	.1	99	+	2.2
50	-	.1	100	+	.1

b)

#		val	#		val
1	+	0	51	+	.2
2	+	.2	52	+	2.5
3	+	.1	53	+	1.9
4	+	0	54	+	2.3
5	+	0	55	+	2.9
6	+	0	56	+	2.9
7	+	.1	57	+	4.7
8	+	.1	58	+	11.2
9	+	.1	59	+	23.1
10	+	0	60	+	32.1
11	+	.1	61	+	37.3
12	-	.6	62	+	38.2
13	+	.1	63	+	38.4
14	+	.7	64	+	5.6
15	+	.1	65	+	5.7
16	+	0	66	+	10.3
17	+	0	67	+	18.5
18	+	0	68	+	29.8
19	+	0	69	+	34.9
20	+	0	70	+	35.7
21	+	0	71	+	35.6
22	+	0	72	+	35.4
23	+	1.0	73	+	35.2
24	+	7.0	74	+	12.9
25	+	.2	75	+	13.2
26	+	.3	76	+	16.7
27	+	.3	77	+	20.5
28	+	.3	78	+	23.3
29	+	.4	79	+	25.4
30	+	1.1	80	+	28.6
31	+	.1	81	+	29.0
32	+	0	82	+	29.4
33	+	0	83	+	30.1
34	+	0	84	+	33.6
35	+	0	85	+	34.2
36	+	0	86	+	34.9
37	-	1.5	87	+	13.3
38	+	2.4	88	+	38.8
39	+	3.6	89	+	38.9
40	+	0	90	+	38.3
41	+	0	91	+	38.3
42	+	0	92	+	20.1
43	+	0	93	+	37.1
44	+	0	94	+	36.3
45	+	0	95	+	35.1
46	+	0	96	+	35.3
47	+	0	97	+	35.2
48	+	0	98	+	35.2
49	+	0	99	+	35.7
50	+	0	100	+	.2

c)

#		val
1	+	.1
2	+	30.3
3	+	30.4
4	+	30.2
5	+	30.2
6	+	30.4
7	+	34.4
8	+	36.9
9	+	45.0
10	+	56.7
11	+	20.0
12	+	18.9
13	+	18.7
14	+	18.1
15	+	19.3
16	+	32.6
17	+	40.7
18	+	50.6
19	+	65.9
20	+	.1
21	+	8.4
22	+	6.9
23	+	6.2
24	+	7.2
25	+	14.1
26	+	28.9
27	+	32.9
28	+	51.7
29	+	60.3
30	+	.1

Seq. 5

2082 .10 60° .15 0 10.0 -5.0° 1.154 2031.8 .002370

a)			b)			c)	
1 + 0	51 + .1		1 + 0	51 + .1		1 + .2	
2 + .2	52 + 2.3		2 + 0	52 + 2.0		2 +30.9	
3 + 0	53 + 1.1		3 + 0	53 + 1.8		3 +31.0	
4 - 2.8	54 +22.3		4 + 0	54 + 2.1		4 +31.0	
5 - 1.9	55 +26.1		5 + 0	55 + 2.3		5 +31.0	
6 + .1	56 +32.7		6 + 0	56 + 1.8		6 +31.3	
7 + .1	57 +36.0		7 + 0	57 + 2.0		7 +33.4	
8 + 0	58 +27.7		8 + 0	58 + 1.7		8 +35.4	
9 + .1	59 +27.3		9 + 0	59 + 2.4		9 +40.7	
10 + .1	60 +32.1		10 + 0	60 +15.3		10 +50.0	
11 - 2.7	61 +34.0		11 - 1.4	61 +42.7		11 +16.4	
12 - 1.9	62 +26.9		12 - 1.4	62 +42.8		12 +14.7	
13 + .1	63 +25.1		13 + .1	63 +41.9		13 +14.6	
14 + .1	64 +30.3		14 + 0	64 + 5.0		14 +14.6	
15 + .1	65 +34.0		15 + 0	65 + 5.0		15 +16.7	
16 + .1	66 +28.7		16 + 0	66 + 5.4		16 +30.5	
17 + 0	67 +23.6		17 + 0	67 +12.1		17 +38.8	
18 - 1.5	68 +28.0		18 + 0	68 +23.7		18 +45.4	
19 - 1.0	69 +31.5		19 + 0	69 +34.4		19 +66.1	
20 + 0	70 +28.3		20 + 0	70 +35.8		20 + .1	
21 + 0	71 +22.1		21 + 0	71 +35.7		21 + 4.6	
22 + 0	72 +25.5		22 + 0	72 +33.0		22 + .4	
23 + 0	73 +29.9		23 + .6	73 +32.7		23 + .1	
24 + 0	74 +32.7		24 + 6.8	74 +15.9		24 + 4.5	
25 - 1.0	75 +29.2		25 + 0	75 +15.6		25 +15.7	
26 - 1.0	76 +29.6		26 + 0	76 +16.5		26 +32.9	
27 + 3	77 +31.5		27 + 0	77 +18.3		27 +39.0	
28 + .3	78 +35.5		28 + 0	78 +20.5		28 +62.2	
29 + .3	79 +34.2		29 + .4	79 +21.6		29 +76.4	
30 + .3	80 +33.9		30 + 4.0	80 +23.4		30 + .1	
31 + .3	81 +33.9		31 + 0	81 +26.4			
32 + 0	82 +30.4		32 + 0	82 +27.8			
33 + 0	83 +30.3		33 + 0	83 +29.2		Seq. 5	
34 + 0	84 +14.4		34 + .1	84 +31.6			
35 + 0	85 +23.4		35 + 2	85 +33.7			
36 + 0	86 +28.9		36 + .2	86 +34.7			
37 + 0	87 +33.0		37 + 1.7	87 + 3.8			
38 + 0	88 +19.7		38 + 3 4	88 +37.4			
39 + 0	89 +19.7		39 + 5.0	89 +37.7			
40 + 0	90 +19.3		40 + 0	90 +36.5			
41 + 0	91 +24.5		41 + 0	91 +36.5			
42 + 0	92 + 4.0		42 + 0	92 + 7.7			
43 + 0	93 +34.4		43 - 0	93 +46.5			
44 + 0	94 +34.3		44 + 0	94 +38.4			
45 + 0	95 +34.3		45 + 0	95 +34.4			
46 + 0	96 +34.4		46 + 0	96 +35.2			
47 + 0	97 +29.3		47 + 0	97 +33.7			
48 + 0	98 + 4.6		48 + 0	98 +33.7			
49 + 0	99 + 3.7		49 - 0	99 +35.5			
50 + 0	100 + 1		50 + 0	100 + 2			

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2133   .10   60°   .10   0    10.0   +5.0°   1.049   2019.8   .002200
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a)				b)				c)	
1	+ 0	51	+ .1	1	+ 0	51	+ .1	1	+ .2
2	+ 0	52	+ 4.4	2	+ 0	52	+ 3.4	2	+ 8.7
3	+ 0	53	+ 1.2	3	+ 0	53	+ 1.1	3	+ 8.9
4	- .7	54	+20.2	4	+ 0	54	+ 9.3	4	+ 8.9
5	- .7	55	+18.3	5	+ 0	55	+10.6	5	+ 8.9
6	+ .1	56	+15.9	6	+ 0	56	+ 8.6	6	+10.0
7	+ .1	57	+18.8	7	+ 0	57	+13.0	7	+15.0
8	+ .1	58	+17.1	8	+ .1	58	+13.2	8	+16.4
9	+ .1	59	+14.1	9	- .5	59	+13.2	9	+22.6
10	+ 7.6	60	+14.6	10	+ .7	60	+13.2	10	+28.9
11	+ .1	61	+15.4	11	+ 5.7	61	+13.3	11	+10.3
12	+ .1	62	+15.5	12	+ 0	62	+14.4	12	+ 9.6
13	+ .1	63	+14.6	13	+ 0	63	+14.7	13	+ 9.6
14	+ .1	64	+16.6	14	+ 1.9	64	+ 2.9	14	+ 9.6
15	+ .1	65	+17.6	15	+ 0	65	+ 3.4	15	+ 9.6
16	+ .1	66	+14.0	16	+ 0	66	+ 5.5	16	+14.5
17	+ .1	67	+14.1	17	+ 0	67	+13.1	17	+16.7
18	+ .1	68	+16.0	18	+ 0	68	+18.9	18	+19.6
19	+ .1	69	+16.2	19	+ 0	69	+19.0	19	+23.1
20	+ .1	70	+13.1	20	+ 0	70	+15.1	20	+ .1
21	+ .1	71	+14.5	21	+ 0	71	+14.8	21	+11.1
22	+ .1	72	+15.1	22	+ 0	72	+14.4	22	+11.5
23	+ .1	73	+15.8	23	+ 0	73	+14.4	23	+11.6
24	+ 0.	74	+14.8	24	+ 0	74	+ .9	24	+11.7
25	+ 0.	75	+15.8	25	+ 0	75	+ 1.0	25	+11.8
26	+ 0.	76	+16.9	26	+ 0	76	+ 1.1	26	+12.6
27	+ 0	77	+17.1	27	+ 0	77	+ 1.3	27	+12.5
28	+ 0	78	+14.3	28	+ 0	78	+ 5.3	28	+14.1
29	+ 0	79	+16.6	29	+ 0	79	+18.6	29	+14.3
30	+ 0	80	+16.8	30	+ 0	80	+18.3	30	+ .1
31	+ 0	81	+16.8	31	+ 0	81	+16.5		
32	- 1.2	82	+14.6	32	+ 0	82	+16.7	Seq. 5	
33	+ .1	83	+ 6.6	33	+ 0	83	+16.8		
34	+ .1	84	+ 7.2	34	+ 0	84	+15.6		
35	+ .1	85	+16.3	35.	+ 0	85	+15.8		
36	+ .1	86	+16.3	36	+ 0	86	+15.9		
37	+ .1	87	+16.5	37	+ 0	87	+11.8		
38	+ .1	88	+ 2.6	38	+ 0	88	+15.1		
39	- .9	89	+ 2.3	39	+ 0	89	+12.5		
40	- .9	90	+19.2	40	· 0	90	+14.2		
41	+ .1	91	+15.9	41	+ 0	91	+15.1		
42	+ 0	92	+ 1.9	42	+ 0	92	+14.8		
43	+ 0	93	+15.1	43	+ 0	93	+13.4		
44	+ 0	94	+16.3	44	+ 0	94	+13.4		
45	+ 0	95	+16.4	45	+ 0	95	+13.9		
46	+ 0	96	+16.4	46	+ 0	96	+15.0		
47	+ 0	97	+12.3	47	+ 0	97	+15.3		
48	+ 0	98	+ 1.6	48	+ 0	98	+16.5		
49	+ 0	99	+ 2.1	49	+ 0	99	+16.9		
50	+ 0	100	+ .1	50	+ 0	100	+ .2		

2134　.10　60°　.10　0　10.0　+2.5°　1.049　2019.8　.002200

a)				b)				c)	
1	- .1	51	+ .1	1	- .1	51	+ .1	1	+ .1
2	- .1	52	+ 3.8	2	- .1	52	+ 4.1	2	+ 8.9
3	- .1	53	+ 1.5	3	- .1	53	+ 1.0	3	+ 8.8
4	- .1	54	+21.3	4	- .1	54	+ 0.4	4	+ 8.8
5	- .1	55	+19.8	5	- .1	55	+10.2	5	+ 8.8
5	- .1	56	+17.7	6	- .1	56	+ 9.2	6	+10.0
7	- .1	57	+19.9	7	- .1	57	+14.4	7	+15.2
8	- .1	58	+18.1	8	- .1	58	+15.0	8	+16.4
9	- .1	59	+17.0	9	- .1	59	+15.3	9	+20.9
10	+ 1.9	60	+16.9	10	+ 0	60	+15.6	10	+26.7
11	- .1	61	+17.0	11	+ 3.4	61	-15.9	11	+12.8
12	- .1	62	+17.2	12	- .1	62	-15.9	12	+12.3
13	- .1	63	+17.3	13	- .1	63	+17.3	13	-12.3
14	- .1	64	-18.4	14	+ 1.4	64	+ 4.5	14	+11.9
15	- .1	65	+19.2	15	- .1	65	+ 4.6	15	+11.8
15	- .1	66	+16.8	16	- .1	66	+ 7.9	16	+16.5
17	- .1	67	+16.4	17	- .1	67	+13.1	17	+17.7
18	- 1	68	+17.0	18	- .1	68	+15.7	18	+20.8
19	- .1	69	+17.5	19	- .1	69	+16.5	19	+24.6
20	- .1	70	+16.3	20	- .1	70	+16.6	20	+ .1
21	- .1	71	+16.2	21	- .1	71	+16.7	21	-10.7
22	- .1	72	+16.8	22	- .1	72	+16.5	22	-11.5
23	- .1	73	-17.1	23	- .1	73	+16.4	23	+11.7
24	- .1	74	+16.9	24	- .1	74	+ 2.0	24	+11.7
25	- .1	75	+17.0	25	- .1	75	+ 2.0	25	+11.9
26	- .1	76	-17.8	26	- .1	76	+ 2.2	26	+13.3
27	- .1	77	-18.0	27	- .1	77	+ 0.7	27	-13.6
28	- .1	78	-15.4	28	+ 0	78	+14.7	28	+15.2
29	- .1	79	-17.0	29	+ 0	79	+16.9	29	+17.4
30	- .1	80	+17.5	30	+ 0	80	+18.0	30	+ .1
31	- .1	81	-17.8	31	+ 0	81	-18.2		
32	- 1.0	82	+16.9	32	+ 0	82	+18.4		
33	+ 0	83	+14.2	33	+ 0	83	+18.4	Seq. 5	
34	+ 0	84	+ 0.8	34	- 0	84	+17.6		
35	+ 0	85	+16.6	35	+ 0	85	+17.6		
36	+ 0	86	+17.1	36	+ 0	86	+17.6		
37	- .1	87	-17.5	37	+ 0	87	+14.6		
38	- .1	88	+ 3.0	38	+ 0	88	+17.4		
39	- 1.7	89	+10.2	39	+ 0	89	+15.0		
40	- 1.2	90	+17.5	40	+ 0	90	+15.6		
41	- .1	91	+17.5	41	+ 0	91	+16.4		
42	- .1	92	+ 1.8	42	+ 0	92	+15.3		
43	- .1	93	+17.1	43	+ 0	93	+15.9		
44	- .1	94	+17.3	44	+ 0	94	+15.6		
45	- .1	95	+17.3	45	+ 0	95	+15.6		
46	- .1	96	+17.3	46	+ 0	96	+16.1		
47	- .1	97	+12.9	47	+ 0	97	+16.3		
48	- .1	98	+ 1.4	48	- 0	98	+17.2		
49	- .1	99	+ 1.9	49	+ 0	99	+17.9		
50	- .1	100	+ .1	50	+ 0	100	+ .2		

2135   .10   60°   .10   0   10.0   0°   1.049   2019.8   .002200

a)				b)				c)	
1 +	.1	51	.2	1	0	51	.1	1	.2
2 +	.1	52	3.6	2	0	52	3.9	2	10.8
3 +	.1	53	1.4	3	0	53	2.2	3	11.0
4 -	.8	54	18.9	4	0	54	4.5	4	11.1
5 -	.8	55	19.5	5	0	55	5.9	5	11.2
6 +	.2	56	19.1	6	0	56	6.0	6	11.8
7 +	.2	57	20.2	7	0	57	12.6	7	15.4
8 +	.2	58	17.8	8	0	58	15.3	8	17.4
9 +	.2	59	17.9	9	0	59	16.7	9	20.9
10 +	.6	60	17.9	10	0	60	17.3	10	25.3
11 -	.2	61	17.9	11	.8	61	17.5	11	14.3
12 +	0	62	17.9	12	.1	62	17.7	12	14.0
13 +	0	63	17.8	13	.1	63	17.8	13	14.0
14 +	0	64	18.9	14	.7	64	4.3	14	13.7
15 +	0	65	19.4	15	0	65	5.1	15	13.7
16 +	0	66	18.6	16	0	66	8.8	16	17.7
17 +	0	67	18.0	17	0	67	12.8	17	20.4
18	0	68	17.9	18	0	68	16.3	18	22.1
19 +	0	69	18.0	19	0	69	17.0	19	26.3
20	0	70	17.6	20	0	70	17.8	20	.1
21	0	71	17.5	21	0	71	17.7	21	11.7
22	0	72	17.5	22	0	72	17.6	22	11.2
23	.1	73	17.5	23	0	73	17.6	23	11.2
24	.1	74	17.5	24	.7	74	3.4	24	11.2
25	.1	75	-17.5	25	.1	75	3.5	25	11.5
26	.1	76	18.0	26	.2	76	6.7	26	14.2
27	.1	77	18.2	27	.1	77	12.5	27	14.8
28	.1	78	17.3	28	.1	78	15.4	28	19.1
29	.1	79	17.3	29	.1	79	17.5	29	20.3
30	.1	80	17.5	30	.1	80	17.9	30	.1
31	.1	81	17.7	31	.1	81	18.1		
32	.1	82	17.0	32	.1	82	18.1	Seq. 5	
33	2.7	83	13.7	33	.1	83	18.1		
34	.1	84	6.3	34	0	84	18.1		
35	.1	85	16.6	35	.1	85	18.1		
36	.1	86	17.2	36	.1	86	18.1		
37	.2	87	17.6	37	0	87	14.9		
38	.2	88	4.2	38	0	88	18.2		
39	.2	89	13.2	39	.1	89	18.4		
40	.2	90	16.7	40	0	90	18.1		
41 +	.2	91	16.9	41 +	.1	91	18.1		
42 +	.2	92	1.7	42 +	0	92	15.5		
43 +	.2	93	16.9	43 +	0	93	16.9		
44 +	.2	94	16.9	44	0	94	17.1		
45 +	.2	95	16.9	45 +	0	95	17.1		
46 +	.2	96	17.0	46	0	96	17.2		
47 +	.2	97	13.6	47 +	0	97	17.4		
48	.2	98	1.5	48	0	98	17.9		
49	.2	99	1.7	49	0	99	18.5		
50 +	.2	100 +	.1	50 +	0	100 +	.2		

2136 .10 60° .10 0 10.0 -2.5° 1.049 2019.8 .002200

a)		b)		c)
1 - .1	51 + .1	1 + 0	51 + .2	1 + .2
2 - .1	52 + 2.9	2 + 0	52 + 3.0	2 +13.7
3 - .1	53 + 1.4	3 + 0	53 + 1.7	3 +13.5
4 - 2.2	54 +18.2	4 + 0	54 + 2.7	4 +13.8
5 - 1.6	55 +19.2	5 + 0	55 + 3.3	5 +14.1
6 + 0	56 +18.3	6 + 0	56 + 2.6	6 +14.4
7 - .1	57 +19.3	7 + 0	57 + 5.5	7 +16.2
8 - .1	58 +17.2	8 + 0	58 +12.8	8 +17.0
9 - .1	59 +17.2	9 + 0	59 +15.8	9 +19.3
10 - .1	60 +17.2	10 - 0	60 +16.7	10 +22.0
11 - 1.0	61 +17.2	11 + 0	61 +17.3	11 +13.1
12 - 1.0	62 +16.8	12 + 0	62 +17.6	12 +12.1
13 + 0	63 +16.8	13 + 0	63 +17.8	13 +11.9
14 + 0	64 +17.7	14 0	64 - 4.1	14 +11.9
15 - .1	65 +18.3	15 + 0	65 - 4.4	15 +12.0
16 - .1	66 +18.0	16 0	66 - 7.7	16 +16.2
17 - .1	67 +17.1	17 + 0	67 +12.2	17 +18.3
18 - .8	68 +17.1	18 + 0	68 -16.2	18 +21.1
19 - .8	69 +17.1	19 + 0	69 +16.5	19 +25.4
20 - .1	70 +14.0	20 + 0	70 +16.5	20 + .4
21 - .1	71 +14.3	21 + 0	71 -16.5	21 + 7.9
22 - .1	72 -15.3	22 + 0	72 -16.4	22 + 8.2
23 - .1	73 -15.8	23 + 0	73 +16.4	23 + 8.2
24 - .1	74 -16.3	24 1.5	74 - 5.4	24 + 8.2
25 - .9	75 +16.5	25 .5	75 - 6.4	25 + 9.2
26 - .9	76 +16.6	26 - .5	76 9.3	26 +13.9
27 0	77 +16.8	27 .5	77 12.9	27 +15.0
28 0	78 16.9	28 .5	78 -13.8	28 +20.9
29 0	79 -17.0	29 .5	79 -14.8	29 +22.2
30 0	80 +17.0	30 .5	80 -15.3	30 .1
31 - .1	81 17.0	31 .5	81 15.6	
32 - .1	82 -16.1	32 - .5	82 15.8	
33 - .1	83 -15.2	33 .5	83 -16.0	Seq. 5
34 - .1	84 + 6.1	34 .5	84 -16.1	
35 - .1	85 +14.6	35 - .5	85 +16.3	
36 - .1	86 +15.7	36 - .4	86 +16.6	
37 - .1	87 -16.4	37 - .4	87 12.9	
38 - .1	88 - 6.7	38 - .4	88 17.4	
39 - .1	89 -12.9	39 - .4	89 -17.7	
40 - .1	90 +14.4	40 0	90 17.6	
41 - .1	91 -15.1	41 + 0	91 17.6	
42 - .1	92 - 1.9	42 + 0	92 +14.6	
43 - .1	93 -15.7	43 + 0	93 -15.8	
44 - .1	94 +16.0	44 + 0	94 +15.6	
45 - .1	95 +16.0	45 + 0	95 +15.9	
46 - .1	96 +16.0	46 + 0	96 +16.0	
47 - .1	97 -12.6	47 + 0	97 +16.1	
48 - .1	98 + 1.6	48 + 0	98 +16.7	
49 - .1	99 + 1.6	49 + 0	99 +17.5	
50 - .1	100 + .1	50 + 0	100 + .1	

2137 .10 60° .10 0 10.0 -5.0° 1.049 2019.8 .002200

a)				b)				c)	
1	- .1	51	.1	1	0	51	.1	1	.1
2	- .1	52	3.3	2	0	52	2.8	2	12.0
3	- .1	53	1.0	3	0	53	2.0	3	12.3
4	- 1.9	54	16.6	4	0	54	2.8	4	12.3
5	- 1.3	55	18.1	5	0	55	3.1	5	12.4
6	+ 0	56	18.2	6	0	56	2.2	6	12.5
7	+ 0	57	18.5	7	0	57	2.4	7	13.4
8	+ 0	58	15.8	8	0	58	2.8	8	14.3
9	+ 0	59	15.8	9	0	59	14.1	9	16.1
10	+ .1	60	15.8	10	0	60	17.8	10	17.8
11	- 2.0	61	15.9	11	- .5	61	17.4	11	9.4
12	- 1.2	62	14.7	12	.1	62	17.4	12	9.0
13	+ 0	63	14.8	13	.1	63	17.4	13	+ 9.0
14	+ 0	64	16.6	14	.1	64	4.5	14	9.0
15	+ 0	65	17.3	15	.1	65	4.4	15	9.4
16	+ 0	66	15.3	16	.1	66	4.8	16	13.9
17	+ 0	67	15.3	17	.1	67	10.7	17	15.8
18	- 2.0	68	15.3	18	.1	68	15.9	18	18.1
19	- 1.2	69	15.4	19	.1	69	16.4	19	22.3
20	- .6	70	13.4	20	- .1	70	15.7	20	.1
21	- .6	71	13.4	21	.1	71	15.6	21	5.8
22	- .5	72	13.0	22	.1	72	15.4	22	6.3
23	- .5	73	14.4	23	.1	73	15.4	23	6.2
24	- .5	74	16.2	24	3.5	74	6.7	24	6.4
25	- .8	75	15.9	25	0	75	7.7	25	8.0
26	- .7	76	16.7	26	0	76	9.2	26	12.7
27	.1	77	15.8	27	0	77	10.6	27	14.1
28	.1	78	16.8	28	0	78	11.5	28	20.0
29	.1	79	16.2	29	0	79	12.3	29	22.8
30	.1	80	16.2	30	.1	80	12.8	30	.1
31	.1	81	16.2	31	.1	81	13.3		
32	0	82	15.6	32	.1	82	13.7		
33	0	83	15.6	33	.1	83	14.1		
34	0	84	6.7	34	0	84	14.6		
35	0	85	13.3	35	0	85	15.0		
36	0	86	14.4	36	0	86	15.3		
37	0	87	15.6	37	.3	87	3.9		
38	0	88	9.3	38	.5	88	15.6		
39	0	89	10.4	39	1.2	89	16.6		
40	0	90	11.1	40	0	90	14.9		
41	+ 0	91	13.0	41	0	91	15.0		
42	+ 0	92	2.7	42	0	92	8.4		
43	+ 0	93	14.6	43	0	93	17.3		
44	+ 0	94	14.8	44	0	94	14.3		
45	+ 0	95	14.9	45	0	95	14.3		
46	0	96	15.0	46	0	96	14.7		
47	0	97	13.0	47	0	97	14.8		
48	+ 0	98	2.2	48	0	98	14.9		
49	0	99	2.2	49	0	99	15.5		
50	+ 0	100	.1	50	0	100	.1		

Seq. 5

2178 .10 60° .05 0 10.0 2.5° 1.049 2021.2 .002235

a)

#		#	
1	.1	51	.1
2	.1	52	3.7
3	0	53	1.7
4	- 1.6	54	34.9
5	- 1.2	55	33.8
6	+ .4	56	32.2
7	.5	57	33.5
8	.5	58	33.0
9	.5	59	32.3
10	5.3	60	32.3
11	- .6	61	32.5
12	- .7	62	32.0
13	.2	63	32.3
14	.2	64	33.0
15	.2	65	33.3
16	.2	66	32.1
17	.2	67	32.1
18	- 1.6	68	32.1
19	- 1.0	69	32.2
20	.1	70	31.3
21	.1	71	31.3
22	.1	72	31.4
23	.1	73	31.4
24	.1	74	31.6
25	- 1.7	75	31.9
26	.1	76	33.0
27	.2	77	33.0
28	.2	78	32.4
29	.2	79	32.4
30	.2	80	32.5
31	.3	81	32.5
32	- 2.8	82	30.5
33	.1	83	32.6
34	.1	84	13.7
35	.1	85	32.8
36	.2	86	32.2
37	.2	87	33.3
38	.2	88	2.4
39	- 3.5	89	29.9
40	.1	90	31.3
41	.1	91	31.4
42	.1	92	3.7
43	+ .1	93	31.5
44	.1	94	31.6
45	+ .1	95	29.8
46	+ .1	96	30.9
47	+ .1	97	24.0
48	+ .1	98	1.7
49	.1	99	2.1
50	+ .1	100	+ .1

b)

#		#	
1	0	51	.2
2	0	52	3.7
3	0	53	.6
4	0	54	7.7
5	0	55	13.5
6	0	56	13.7
7	0	57	26.1
8	0	58	29.6
9	.2	59	31.1
10	.1	60	31.1
11	4.4	61	31.1
12	0	62	31.5
13	0	63	31.8
14	2.1	64	3.7
15	0	65	4.2
16	0	66	14.4
17	0	67	30.7
18	0	68	32.4
19	0	69	32.4
20	0	70	30.9
21	0	71	30.7
22	0	72	30.7
23	0	73	30.7
24	- .5	74	1.5
25	.1	75	.2
26	.1	76	.8
27	.1	77	18.6
28	.1	78	33.7
29	.1	79	33.3
30	.1	80	32.9
31	.1	81	32.1
32	.1	82	32.4
33	.1	83	32.6
34	.1	84	31.0
35	.1	85	31.6
36	.1	86	31.8
37	.1	87	27.8
38	.1	88	31.8
39	.1	89	30.3
40	.1	90	30.8
41	.1	91	31.1
42	.1	92	28.5
43	.1	93	30.9
44	.1	94	30.8
45	.1	95	30.9
46	1	96	31.0
47	.1	97	31.1
48	.1	98	32.3
49	.1	99	32.6
50	.1	100	+ .2

c)

#	
1	.1
2	26.8
3	26.9
4	26.9
5	26.9
6	27.6
7	29.7
8	31.6
9	35.9
10	39.4
11	29.1
12	28.4
13	28.4
14	27.2
15	27.2
16	30.4
17	32.5
18	33.9
19	38.0
20	.1
21	31.0
22	27.1
23	25.9
24	26.2
25	26.3
26	33.5
27	26.5
28	33.9
29	28.9
30	.2

Seq. 5

2179   .10 60°   .05   0   10.0   0°   1.050   2021.2   .002235

a)				b)				c)	
1 + .1		51 + .2		1 - .1		51 + .2		1 + .2	
2 + .1		52 + 3.5		2 - .1		52 + 2.8		2 +28.0	
3 + .2		53 + .5		3 - .1		53 + .2		3 +28.6	
4 - 2.8		54 +35.3		4 - .1		54 + 3.1		4 +29.0	
5 - 1.5		55 +36.5		5 - .1		55 + 4.7		5 +29.3	
6 - .3		56 +34.7		6 - .1		56 + 5.7		6 +29.7	
7 - .3		57 +36.7		7 - .1		57 +24.4		7 +33.5	
8 - .3		58 +34.8		8 - .1		58 +31.9		8 +34.4	
9 - .3		59 +34.7		9 - .1		59 +32.3		9 +36.9	
10 + 2.0		60 +34.7		10 - .1		60 +32.6		10 +40.1	
11 - 2.0		61 +34.4		11 - .1		61 +32.8		11 +30.7	
12 - 1.0		62 +34.5		12 - .1		62 +33.2		12 +30.0	
13 + .1		63 +34.5		13 - .1		63 +33.7		13 +30.1	
14 + .1		64 +36.4		14 - .1		64 + 4.2		14 +29.2	
15 + .1		65 +36.5		15 + 0		65 + 4.8		15 +29.2	
16 + .1		66 +35.9		16 + 0		66 +15.3		16 +34.1	
17 + .1		67 +35.2		17 + 0		67 +28.9		17 +35.2	
18 - 1.9		68 +35.2		18 + 0		68 +32.5		18 +36.9	
19 - 1.2		69 +35.2		19 + 0		69 +32.8		19 +40.8	
20 - .1		70 +32.9		20 + 0		70 +32.9		20 + .2	
21 - .1		71 +33.2		21 + 0		71 +32.9		21 +29.0	
22 - .1		72 +33.6		22 + 0		72 +33.0		22 +26.8	
23 - .1		73 +33.8		23 + 0		73 +33.2		23 +27.0	
24 - .1		74 +34.0		24 + .4		74 + 3.0		24 +27.2	
25 - 2.2		75 +34.5		25 - .1		75 + 3.0		25 +27.2	
26 + .2		76 +34.9		26 - .1		76 +13.6		26 +32.4	
27 + .3		77 +35.0		27 + 0		77 +27.5		27 +26.7	
28 + .3		78 +34.0		28 + 0		78 +31.0		28 +36.9	
29 + .3		79 +34.1		29 + 0		79 +32.6		29 +35.8	
30 + .3		80 +34.5		30 + 0		80 +32.9		30 + .1	
31 + .3		81 +34.7		31 + 0		81 +33.1			
32 - 1.8		82 +32.5		32 + 0		82 +33.6		Seq. 5	
33 + .1		83 +31.5		33 + 0		83 +30.0			
34 + .1		84 +16.0		34 + 0		84 +34.0			
35 + .1		85 +33.9		35 + 0		85 +34.0			
36 + .1		86 +34.1		36 - .6		86 +34.1			
37 + .1		87 +34.5		37 + 0		87 +32.3			
38 + .1		88 + 4.4		38 - .1		88 +34.4			
39 - 1.9		89 +30.1		39 - .1		89 +34.3			
40 - .1		90 +33.0		40 - .1		90 +34.3			
41 - .1		91 +33.4		41 - .1		91 +34.3			
42 - .1		92 + 3.7		42 - .1		92 +30.6			
43 - .1		93 +34.3		43 - .1		93 +32.0			
44 + .2		94 +34.4		44 - .1		94 +32.7			
45 + .2		95 +33.7		45 - .1		95 +33.0			
46 + .2		96 +33.8		46 - .1		96 +33.3			
47 + .3		97 +27.1		47 - .1		97 +33.5			
48 + .3		98 + 2.5		48 - .1		98 +34.2			
49 + .3		99 + 2.5		49 - .1		99 +34.7			
50 + .3		100 + .1		50 - .1		100 + .2			

2180 .10 60° .05 0 10.0 -2.5° 1.048 2021.2 .002235

a)			b)			c)	
1 + 0		51 + .2	1 - .1		51 + .1	1 + .1	
2 + 0		52 + 2.4	2 - .1		52 + 2.6	2 +26.5	
3 + 0		53 + .5	3 - .1		53 + .2	3 +26.4	
4 - 4.9		54 +31.9	4 - .1		54 + 2.2	4 +26.4	
5 - 1.8		55 +32.7	5 - .1		55 + 1.8	5 +26.4	
6 + .1		56 +32.8	6 · 1		56 + 1.1	6 +28.8	
7 + .1		57 +32.8	7 - .1		57 + 4.9	7 +29.0	
8 + .1		58 +32.1	8 - .1		58 +32.2	8 +29.6	
9 + .1		59 +32.0	9 - .1		59 +32.4	9 +37.3	
10 + .2		60 +32.0	10 - .1		60 +32.4	10 +37.3	
11 - 3.8		61 +31.9	11 - 1.4		61 +32.3	11 +26.6	
12 - 1.7		62 +31.3	12 + 0		62 +32.3	12 +23.6	
13 + .1		63 +31.3	13 + 0		63 +32.3	13 +23.6	
14 + 0		64 +31.8	14 - .9		64 + 4.4	14 +23.2	
15 + 0		65 +32.2	15 - .1		65 + 4.5	15 +24.4	
16 + 0		66 +31.8	16 - .1		66 +13.8	16 +31.2	
17 + 0		67 +31.7	17 - .1		67 +29.7	17 +31.4	
18 - 2.9		68 +31.7	18 - .1		68 +30.3	18 +32.9	
19 - 1.9		69 +31.7	19 - .1		69 +30.5	19 +37.0	
20 + .1		70 +30.6	20 - .1		70 +30.5	20 + .2	
21 + .1		71 +30.6	21 - .1		71 +30.5	21 +26.8	
22 + 0		72 +30.5	22 - .1		72 +30.5	22 +26.2	
23 + 0		73 +30.5	23 - .1		73 +30.5	23 +25.7	
24 + 0		74 +30.7	24 + 2.1		74 + 6.5	24 +25.8	
25 - 1.9		75 +30.8	25 - .1		75 + 9.4	25 +26.0	
26 - 1.6		76 +30.9	26 - .1		76 +19.3	26 +30.4	
27 + .1		77 +31.0	27 - .1		77 +25.6	27 +26.6	
28 + .1		78 +32.0	28 - .1		78 +28.1	28 +35.3	
29 + .1		79 +31.0	29 - .1		79 +29.0	29 +32.2	
30 + .1		80 +31.0	30 - .1		80 +29.8	30 + .1	
31 + .1		81 +30.9	31 - .1		81 +30.1		
32 - 2:2		82 +29.8	32 - .4		82 +30.4	Seq. 5	
33 - 1.7		83 +29.5	33 + 0		83 +30.8		
34 - 1.3		84 +12.6	34 + 0		84 +30.9		
35 - 1.1		85 +29.7	35 + 0		85 +31.0		
36 + 0		86 +29.9	36 - 1.2		86 +31.1		
37 + 0		87 +30.2	37 + .1		87 +31.3		
38 + 0		88 + 7.8	38 + .1		88 +31.9		
39 - 1.6		89 +26.1	39 .2		89 +32.0		
40 - 1.6		90 +28.0	40 - .1		90 +31.9		
41 + .1		91 +29.1	41 - .1		91 +31.9		
42 + .1		92 + 3.7	42 - .1		92 +31.9		
43 + .1		93 +30.3	43 - .1		93 +31.8		
44 + .1		94 +30.3	44 - .1		94 +31.8		
45 + .1		95 +29.5	45 - .1		95 +31.8		
46 + .1		96 +30.0	46 - .1		96 +31.8		
47 + .1		97 +24.2	47 - .1		97 +30.8		
48 + .1		98 + 2.8	48 - .1		98 +31.8		
49 + .1		99 + 2.7	49 - .1		99 +32.0		
50 + .1		100 + .1	50 - .1		100 + .2		

2211   .10   60°   .03   0   10.0   -2.5°   1.049   2021.9   .002236

a)		b)		c)	
1 + 0	51 + .1	1 + 0	51 + .2	1 + .2	
2 + 0	52 + 3.7	2 + 0	52 + 3.5	2 +41.4	
3 + 0	53 + .6	3 + 0	53 + .5	3 +42.5	
4 - 8.2	54 +43.7	4 + 0	54 + 1.9	4 +42.3	
5 + .1	55 +46.7	5 - .1	55 + .1	5 +42.3	
6 + .1	56 +45.8	6 - .1	56 - 1.6	6 +42.3	
7 + .1	57 +46.9	7 - .1	57 - 7.6	7 +44.3	
8 + .1	58 +42.8	8 - .1	58 +47.8	8 +45.5	
9 + .1	59 +44.3	9 - .1	59 +45.7	9 +47.9	
10 + 3.2	60 +44.5	10 - .1	60 +45.4	10 +49.6	
11 - 7.8	61 +44.7	11 - 3.5	61 +42.8	11 +45.0	
12 + 0	62 +43.7	12 + .1	62 +44.2	12 +44.7	
13 + 0	63 +44.6	13 + .1	63 +44.5	13 +44.7	
14 + 0	64 +46.3	14 - 2.2	64 + 2.6	14 +42.8	
15 + 0	65 +46.6	15 + 0	65 + 2.7	15 +42.8	
16 + 0	66 +44.5	16 + 0	66 +16.6	16 +46.8	
17 + 0	67 +44.7	17 + 0	67 +43.6	17 +48.0	
18 - 6.0	68 +45.0	18 + 0	68 +43.9	18 +49.6	
19 - 1.5	69 +45.1	19 + 0	69 +43.4	19 +52.0	
20 + .1	70 +44.0	20 + 0	70 +49.4	20 + .4	
21 + .1	71 +44.0	21 + 0	71 +43.4	21 +45.4	
22 + .1	72 +44.0	22 + 0	72 +43.4	22 +45.9	
23 + .1	73 +44.0	23 + .2	73 +43.4	23 +46.0	
24 + .1	74 +45.0	24 + 1.8	74 + 5.4	24 +46.0	
25 - 3.3	75 +45.2	25 + .4	75 +11.6	25 +45.5	
26 - 1.3	76 +45.3	26 + .4	76 +27.6	26 +46.5	
27 - 1.2	77 +45.4	27 + .4	77 +37.9	27 +44.6	
28 + 0	78 +45.4	28 + .5	78 +40.7	28 +49.7	
29 + 0	79 +45.3	29 + .5	79 +42.4	29 +48.1	
30 + 0	80 +45.3	30 + .5	80 +43.0	30 + .2	
31 + 0	81 +45.3	31 + .5	81 +43.2		
32 - 2.6	82 +42.1	32 + .1	82 + 3.5	Seq. 5	
33 - 1.8	83 +43.2	33 + .1	83 +43.7		
34 - 1.5	84 +20.5	34 + .1	84 +43.8		
35 + 0	85 +44.1	35 - .3	85 +44.0		
36 + 0	86 +44.3	36 - 1.2	86 +44.1		
37 + 0	87 +44.8	37 - 1.3	87 +46.5		
38 + 0	88 + 7.3	38 + .7	88 +46.6		
39 - 2.4	89 +40.5	39 + .7	89 +42.9		
40 - 1.8	90 +43.1	40 + .7	90 +43.3		
41 - 1.2	91 +44.0	41 + 0	91 +43.7		
42 + 0	92 + 4.7	42 + 0	92 +47.1		
43 + 0	93 +44.5	43 + 0	93 +41.9		
44 + 0	94 +44.6	44 + 0	94 +42.7		
45 + 0	95 +41.9	45 + 0	95 +43.1		
46 + 0	96 +44.0	46 + 0	96 +43.3		
47 + 0	97 +34.1	47 - .1	97 +43.5		
48 + 0	98 + 2.3	48 - .1	98 +44.3		
49 + 0	99 + 2.5	49 - .1	99 +45.0		
50 + 0	100 + .1	50 - .1	100 + .1		

2212 .10 60° .03 0 10.0 0° 1.049 2021.9 .002236

a)				b)				c)	
1 + 0		51 + .2		1 + 0		51 + .1		1 + .2	
2 + 0		52 + 3.0		2 + .2		52 + 3.2		2 +47.0	
3 + 0		53 + 1.3		3 + .2		53 + 1.0		3 +46.6	
4 - 3.7		54 +48.1		4 + .2		54 + 2.4		4 +45.9	
5 - 1.6		55 +48.7		5 + .2		55 + 3.5		5 +46.0	
6 - 1.0		56 +48.4		6 + .2		56 + 4.5		6 +46.8	
7 + .1		57 +49.0		7 + .2		57 +34.5		7 +48.6	
8 + .1		58 +47.2		8 + .2		58 +44.4		8 +49.6	
9 + .1		59 +47.2		9 + .2		59 +44.7		9 +51.7	
10 + 1.9		60 +47.2		10 + .2		60 +45.2		10 +53.9	
11 - 4.1		61 +47.2		11 - 1.5		61 +45.7		11 +46.9	
12 - 1.3		62 +47.3		12 + 0		62 +46.8		12 +47.0	
13 + .1		63 +47.3		13 + 0		63 +47.4		13 +46.8	
14 + .1		64 +48.3		14 - 1.3		64 + 3.2		14 +45.6	
15 + .1		65 +48.7		15 + 0		65 + 3.2		15 +45.8	
16 + .1		66 +48.5		16 + 0		66 +18.4		16 +49.0	
17 + .1		67 +47.9		17 - .1		67 +41.5		17 +50.2	
18 - 3.8		68 +47.8		18 - .1		68 +44.4		18 +51.6	
19 - 1.3		69 +47.8		19 - .1		69 +44.9		19 +54.5	
20 + .1		70 +46.1		20 - .1		70 +45.3		20 + .1	
21 + .1		71 +46.1		21 - .1		71 +45.7		21 +45.8	
22 + .1		72 +46.3		22 - .1		72 +45.9		22 +45.7	
23 + .1		73 +46.6		23 - .1		73 +46.2		23 +45.8	
24 + .1		74 +47.0		24 - .1		74 + 2.6		24 +45.8	
25 - 3.5		75 +47.4		25 .1		75 + 2.1		25 +45.5	
26 - 1.0		76 +47.8		26 - .1		76 +13.0		26 +48.3	
27 - .8		77 +48.0		27 - .1		77 +39.5		27 +41.7	
28 - .6		78 +46.7		28 - .1		78 +43.6		28 +50.8	
29 - .5		79 +47.1		29 - .1		79 +44.8		29 +44.3	
30 - ..		80 +47.4		30 - .1		80 +45.7		30 + .1	
31 - .3		81 +47.6		31 - .1		81 +46.2			
32 - 4.2		82 +45.3		32 - .1		82 +46.7		Seq. 5	
33 - 1.0		83 +44.4		33 - .1		83 +47.0			
34 - .9		84 +22.4		34 - .1		84 +47.2			
35 - .7		85 +46.7		35 - .1		85 +47.3			
36 + .1		86 +47.0		36 - 1.0		86 +47.3			
37 + .1		87 +47.4		37 + 0		87 +43.7			
38 + .1		88 + 2.8		38 - .1		88 +47.9			
39 - 4.2		89 +42.5		39 - .1		89 +47.1			
40 - 1.5		90 +45.9		40 - .1		90 +47.1			
41 + .1		91 +46.6		41 - .1		91 +47.0			
42 + .1		92 + 5.5		42 - .1		92 +43.9			
43 + .1		93 +47.3		43 - .1		93 +45.5			
44 + .1		94 +47.4		44 - .1		94 +46.1			
45 + .1		95 +44.3		45 - .1		95 +46.3			
46 + 0		96 +46.5		46 - .1		96 +46.6			
47 + 0		97 +36.1		47 - .1		97 +46.7			
48 + 0		98 + 3.2		48 - .1		98 +47.4			
49 + 0		99 + 3.2		49 - .1		99 +47.9			
50 + 0		100 + .1		50 - .1		100 + .1			

2213 .10 60° .03 0 10.0 +2.5° 1.049 2021.9 .002236

a)				b)				c)	
1	- .1	51	+ .1	1	+ .1	51	+ .1	1	+ .1
2	- .1	52	+ 3.0	2	+ 0	52	+ 2.6	2	+46.6
3	- .1	53	+ 1.9	3	+ 0	53	+ 1.1	3	+46.7
4	- 2.7	54	+46.9	4	+ 0	54	+ 6.5	4	+46.7
5	- 1.7	55	+46.1	5	+ 0	55	+15.1	5	+46.7
6	- .9	56	+45.6	6	+ 0	56	+18.2	6	+46.7
7	- .7	57	+46.0	7	+ 0	57	+36.1	7	+48.1
8	+ 0	58	+45.9	8	+ 0	58	+41.2	8	+49.0
9	+ 0	59	+45.3	9	+ .7	59	+42.0	9	+50.9
10	+ .8	60	+45.3	10	+ .1	60	+42.5	10	+53.8
11	- 1.8	61	+45.2	11	+ 4.7	61	+42.9	11	+44.6
12	- 1.6	62	+45.2	12	+ 0	62	+43.4	12	+44.6
13	- 1.2	63	+45.2	13	+ 0	63	+43.8	13	+44.4
14	- .1	64	+45.4	14	+ .9	64	+43.1	14	+43.6
15	- .1	65	+45.8	15	+ 0	65	+ 3.0	15	+43.5
16	- .1	66	+45.0	16	- 0	66	+16.2	16	+46.3
17	- .1	67	+45.0	17	+ 0	67	+43.5	17	+48.0
18	- 2.6	68	+45.0	18	+ 0	68	+43.6	18	+49.4
19	- 1.5	69	+44.9	19	+ 0	69	+44.6	19	+51.3
20	+ 0	70	+44.4	20	+ 0	70	+44.1	20	+ .1
21	+ 0	71	+44.3	21	+ 0	71	+44.0	21	+41.4
22	+ 0	72	+44.3	22	+ 0	72	+44.0	22	+41.1
23	+ 0	73	+44.3	23	+ 0	73	+44.0	23	+41.1
24	+ 0	74	+43.1	24	- 1.6	74	+ 1.6	24	+41.1
25	- 3.1	75	+44.2	25	+ .3	75	- 1.5	25	+40.9
26	- 1.3	76	+45.0	26	+ .3	76	- 5.1	26	+43.0
27	- 1.0	77	+45.2	27	+ .3	77	+17.8	27	+38.1
28	+ 0	78	+42.5	28	+ .3	78	+46.1	28	+45.8
29	+ 0	79	+44.0	29	+ .3	79	+46.1	29	+41.1
30	+ 0	80	+44.5	30	+ .3	80	+43.2	30	+ .1
31	+ 0	81	+44.7	31	+ .3	81	+43.6		
32	- 5.7	82	+42.6	32	+ .3	82	+43.9		Seq. 5
33	- 1.2	83	+46.4	33	+ .3	83	+44.2		
34	+ .1	84	+22.1	34	+ .3	84	+44.3		
35	+ .1	85	+44.1	35	+ .3	85	+44.3		
36	+ .1	86	+44.5	36	+ .3	86	+44.3		
37	+ .1	87	+44.7	37	+ .3	87	+40.4		
38	+ .1	88	+ 1.6	38	+ .3	88	+44.8		
39	- 7.0	89	+45.5	39	+ .3	89	+43.4		
40	+ .1	90	+43.0	40	+ .3	90	+43.4		
41	+ .1	91	+43.6	41	+ .1	91	+43.6		
42	+ .1	92	+ 5.6	42	+ .1	92	+43.3		
43	+ .1	93	+44.2	43	+ .1	93	+43.3		
44	+ .1	94	+44.5	44	+ .1	94	+43.3		
45	+ .1	95	+42.9	45	+ .1	95	+43.3		
46	+ 0	96	+44.0	46	+ 0	96	+43.5		
47	+ 0	97	+35.2	47	+ 0	97	+43.6		
48	+ 0	98	+ 3.3	48	+ 0	98	+44.5		
49	+ 0	99	+ 3.2	49	+ 0	99	+45.0		
50	+ 0	100	+ .1	50	+ 0	100	+ .2		

2234 .10 60° .01 0 10.0 0° 1.049 2021.2 .002260

a)

#			#		
1	+	0	51	+	.2
2	+	.2	52	+	.2
3	+	.2	53	+	.2
4	-	7.2	54	-	6.9
5	-	1.6	55	-	3.0
6	+	.6	56	-	1.9
7	+	.6	57	-	1.6
8	+	.6	58	-	1.4
9	+	.6	59	-	1.3
10	+	9.5	60	+	8.7
11	-	6.9	61	-	8.4
12	-	1.5	62	-	2.7
13	+	.1	63	-	1.8
14	+	.1	64	+	.1
15	+	.1	65	+	.1
16	+	.1	66	+	.1
17	+	.1	67	+	.1
18	-	8.5	68	-	9.8
19	-	1.5	69	-	1.6
20	+	.1	70	+	.1
21	+	.3	71	+	.1
22	+	.3	72	+	.1
23	+	.6	73	+	.1
24	+	.6	74	+	.1
25	-	8.0	75	-	8.2
26	-	1.4	76	-	1.9
27	+	.1	77	-	1.9
28	+	.1	78	+	.1
29	+	.1	79	+	.1
30	+	.1	80	+	.1
31	+	.1	81	+	.1
32	-	7.3	82	-	8.8
33	-	1.1	83	-	2.1
34	+	.1	84	+	.1
35	+	.2	85	+	.1
36	+	.2	86	+	.1
37	+	.2	87	+	.1
38	+	.2	88	+	.1
39	-	7.4	89	-	8.4
40	-	1.2	90	-	1.9
41	+	.1	91	-	1.6
42	+	.1	92	+	.1
43	+	.1	93	+	.1
44	+	.1	94	+	.1
45	+	.1	95	+	.1
46	+	.1	96	+	.1
47	+	.1	97	+	.1
48	+	.1	98	+	.1
49	+	.1	99	+	.1
50	+	.1	100	+	.1

b)

#			#		
1	-	.2	51	+	.2
2	-	.1	52	+	.2
3	-	.1	53	+	.2
4	-	.1	54	+	.2
5	-	.1	55	+	.2
6	-	.1	56	+	.1
7	-	.1	57	+	.1
8	-	.1	58	+	.1
9	-	.1	59	+	.1
10	-	.1	60	+	.1
11	-	3.5	61	-	3.2
12	-	.1	62	+	.2
13	-	.1	63	+	.1
14	-	4.3	64	-	4.1
15	-	.1	65	+	.1
16	-	.1	66	+	.1
17	-	.1	67	+	.1
18		.1	68		.1
19	-	.1	69		.1
20	-	.1	70	+	.1
21	-	.1	71		.1
22	-	.1	72		.1
23	-	.1	73		.1
24	-	2.3	74	-	2.2
25		0	75		.1
26	-	.1	76	-	.1
27	+	.1	77	-	.1
28	+	.2	78		.1
29	+	.2	79	+	.1
30	-	.2	80		.1
31	-	.2	81	+	.1
32	+	.2	82		.1
33	+	.3	83	+	.1
34	+	.3	84	+	.1
35	+	.2	85	+	.1
36	-	.8	86	-	.8
37	+	.1	87	+	.2
38	+	.1	88	+	.1
39	+	.1	89		.1
40	+	.1	90	+	.1
41	+	.1	91	+	.1
42	+	.1	92	+	.1
43	+	.1	93	+	.1
44	+	.1	94	+	.1
45	+	.1	95	+	.1
46	-	.1	96	+	.1
47	-	.1	97	+	.1
48	-	.1	98	+	.1
49	-	.1	99	+	.1
50	-	.1	100	+	.1

c)

#		
1	+	.1
2	+	74.6
3	+	74.1
4	+	73.5
5	+	73.7
6	+	74.2
7	+	75.3
8	+	75.7
9	+	76.8
10	+	77.3
11	+	76.1
12	+	75.7
13	+	75.7
14	+	74.0
15	+	74.3
16	+	74.9
17	+	75.3
18	+	76.0
19	+	77.1
20	+	.1
21	+	73.7
22	+	73.9
23	+	74.0
24	+	73.9
25	+	70.4
26	+	73.0
27	+	65.6
28	+	75.5
29	+	65.5
30	+	.1

Seq. 5

```
       2255` .10  30°  .25   0   10.0  +2.5°  1.049  2050.9  .002283

   a)1 +  0        51 +   .2      b)1 +  0       51 +   .1      c)1 +   .1
     2 +  0        52 . 4.3        2 +  0        52 + 4.0        2 + 1.1
     3 +  0        53 +  .8        3 +  0        53 +  .8        3 - 2.7
     4 +  0        54  11.0        4 +  0        54 · 6.0        4 - 2.7
     5 -  .1       55 + 9.7        5 +  0        55 + 6.0        5 - 2.7
     6 -  .1       56 : 8.3        6 +  0        56 · 5.0        6 - 2.6
     7 -  .1       57 · 9.7        7 +  0        57 + 5.3        7 +14.4
     8 -  .1       58   3.0        8 +  0        58 · 5.4        8 +20.7
     9 -  .1       59 : 5.7        9 +  0        59 · 3.2        9 · 2.1
    10 +  .5       60 · 6.0       10 +  0        60 · 3.2       10 · 2.4
    11 -  .1       61 · 6.9       11 + 2.5       61 · 3.2       11 + 1.9
    12 -  .1       62 . 7.0       12 -  .1       62 · 4.5       12 -  .6
    13 -  .1       63 + 4.5       13 -  .1       63 + 5.0       13 -  .9
    14 -  .1       64 · 7.5       14 + 1.1       64 · 4.8       14 - 2.2
    15 -  .1       65 : 9.4       15 + 0         65 + 4.9       15 - 2.3
    16 -  .1       66   7.0       16 -  .1       66 · 5.2       16 +13.4
    17 -  .1       67 · 2.9       17 -  .1       67 + 5.3       17 +  .7
    18 -  .1       68 · 5.0       18 -  .1       68 · 6.3       18 +  .6
    19 -  .1       69 · 6.8       19 -  .1       69 + 7.7       19 ·  .8
    20 -  .1       70   3.7       20 -  .1       70 · 7.9       20 ·  .1
    21 -  .1       71 · 1.9       21 -  .1       71 · 8.0       21 +  .9
    22 -  .1       72   2.9       22 -  .1       72 · 6.6       22 +  .1
    23 -  .1       73 : 6.6       23 -  .1       73 + 6.3       23 +  .1
    24 -  .1       74   5.5       24 -  .1       74 · 2.9       24 +  .1
    25 -  .1       75 · 3.9       25 -  .1       75 · 3.1       25 +  .1
    26 -  .1       76 · 5.4       26 -  .1       76 · 3.5       26 +10.2
    27 -  .1       77 · 7.2       27 -  .1       77 + 3.7       27 +  .1
    28 -  .1       78 · 4.1       28 -  .1       78 · 4.0       28 +  .1
    29 -  .1       79 · 2.4       29 -  .1       79 + 6.0       29 ·  .5
    30 -  .1       80   4.1       30 -  .1       80 · 9.4       30 +  .1
    31 -  .1       81 · 7.1       31 -  .1       81  10.5
    32 -  .1       82 · 8.7       32 -  .1       82 ·10.6       Seq. 5
    33 -  .1       83 · 4.3       33 -  .1       83 · 8.6
    34 -  .1       84   3.5       34 -  .1       84 · 6.7
    35 -  .1       85 + 8.4       35 -  .1       85 · 7.3
    36 -  .1       86 · 5.0       36 -  .1       86 · 7.7
    37 -  .1       87 : 6.8       37 -  .1       87 · 7.8
    38 -  .1       88 · 3.2       38 -  .1       88 · 5.5
    39 -  .1       89 · 3.8       39 ·  .9       89 · 4.2
    40 -  .1       90 · 8.6       40 - 0         90 · 5 4
    41 -  .1       91 : 8.7       41 -  .1       91 · 6 7
    42 -  .1       92 · 2.1       42 -  .1       92 · 7.4
    43 -  .1       93 · 6.8       43 -  .1       93 + 7.6
    44 -  .1       94 · 5.4       44 -  .1       94 · 3.0
    45 -  .1       95 · 5.5       45 -  .1       95 + 4.0
    46 -  .1       96 · 6.8       46 -  .1       96 + 5.9
    47 -  .1       97 · 5.1       47 -  .1       97 + 5.9
    48 -  .1       98 · 2.4       48 -  .1       98 · 7.7
    49 -  .1       99 · 2.7       49 -  .1       99 · 8.5
    50 -  .1      100 +  .1       50 ·  .1      100 +  .1
```

2256 .10 30° .25 0 10.0 0° 1.048 2050.9 .002283

a)

1	+	0	51	+	.2
2	+	0	52	+	3.7
3	+	0	53	+	2.2
4	+	0	54	+	8.3
5	+	0	55	+	7.5
6	+	0	56	+	6.6
7	+	0	57	+	9.0
8	+	0	58	+	6.6
9	+	0	59	-	4.7
10	+	1.5	60	-	5.2
11	+	0	61	+	6.4
12	+	0	62	+	6.8
13	+	0	63	+	6.6
14	+	0	64	+	7.8
15	+	0	65	+	9.2
16	+	0	66	+	9.1
17	+	0	67	+	6.7
18	-	0	68	+	6.7
19	+	0	69	+	7.0
20	+	0	70	+	5.9
21	+	0	71	+	5.5
22	-	0	72	+	5.5
23		0	73	+	6.1
24		0	74	+	7.1
25		0	75	+	7.1
26		0	76	+	7.2
27	+	0	77	+	7.4
28		0	78		5.9
29		0	79	+	5.8
30	+	0	80		6.0
31	+	0	81		6.8
32	+	0	82		7.3
33		0	83		7.5
34	+	0	84		3.0
35	+	3.0	85		4.4
36	+	0	86		5.6
37	+	0	87	+	6.7
38	+	0	88		4.4
39	+	1.5	89	+	6.3
40	+	0	90		7.7
41	+	0	91		4.8
42	+	0	92	+	2.7
43	+	0	93	+	5.9
44	+	0	94		6.1
45	+	0	95	+	5.4
46	+	0	96	+	6.1
47	+	0	97	+	5.7
48	+	0	98	+	2.7
49	+	0	99	+	2.7
50	+	0	100	+	.1

b)

1	+	0	51	+	.1
2	+	0	52	+	3.4
3	+	0	53	+	1.5
4	+	0	54	+	4.3
5	+	0	55	+	5.2
6	+	0	56	+	5.3
7	+	0	57	+	6.3
8	+	0	58	+	7.4
9	+	0	59	+	8.2
10		0	60	+	8.9
11	-	.6	61	+	8.9
12	+	.1	62	+	8.6
13	-	0	63	+	8.1
14	+	0	64	+	6.6
15		0	65	+	6.6
16	+	0	66	+	6.6
17	+	0	67	+	6.6
18	+	0	68	+	7.6
19		0	69	+	8.2
20		0	70	+	7.5
21		0	71	-	5.1
22		0	72		4.7
23		0	73		4.8
24	+	1.1	74		4.8
25		0	75		4.8
26		0	76		5.3
27		0	77		6.2
28		0	78		8.4
29		0	79	+	9.3
30		0	80		9.5
31	+	0	81		7.3
32		0	82		7.2
33	+	0	83	+	7.2
34	+	0	84		7.2
35	+	0	85		7.2
36	+	0	86		7.2
37	+	0	87	+	7.4
38	+	0	88	+	7.5
39	+	.6	89	+	8.7
40	+	.1	90		5.5
41	+	0	91		6.0
42	+	0	92	-	7.5
43	+	0	93	+	7.6
44	+	0	94		6.1
45	+	0	95		6.1
46	+	0	96		6.1
47	+	0	97	+	6.1
48	+	0	98		7.1
49	+	0	99	+	8.1
50	+	0	100	+	.2

c)

1	+	.1
2	+	.3
3	-	1.5
4	+	.2
5	+	.2
6	+	.2
7	+	8.7
8	+	15.3
9	+	1.8
10	+	1.7
11	+	1.2
12	+	.4
13	-	1.0
14	-	2.4
15	-	2.5
16	+	11.9
17	+	.3
18	+	.3
19	+	4.9
20	+	.1
21	+	.1
22	+	.1
23	-	3.6
24	-	3.6
25	-	3.7
26	+	12.9
27	-	.2
28	-	.2
29	-	.2
30	-	.1

Seq. 5

2257 .10 30° .25 0 10.0 -2.5° 1.049 2050.9 .002283

a)1 + .1   51 + .2   b)1 · 0   51 · .1   c)1 + .1
  2 + 0   52 : 3.9   2 · 0   52 · 2.6   2 + 1.7
  3 + 0   53 : .7   3 · 0   53 + 1.1   3 · .1
  4 + 0   54 : 6.7   4 · 0   54 · 2.6   4 · .1
  5 + 0   55 : 5.2   5 · 0   55 : 3.4   5 : .1
  6 + 0   56 · 5.7   6 · 0   56 : 3.0   6 · .1
  7 + 0   57 : 9.5   7 · 0   57 · 3.4   7 · 7.6
  8 + 0   58 · 5.6   8 · 0   58 · 3.7   8 +11.7
  9 + 0   59 + 3.2   9 · 0   59 + 4.0   9 · 2.5
 10 + .6   60 · 4.0   10 · 0   60 · 5.1   10 · 2.8
 11 + 0   61 · 6.4   11 · 0   61 · 6.4   11 − .2
 12 + 0   62 : 6.5   12 + 0   62 · 9.7   12 + .2
 13 + 0   63 · 4.9   13 + 0   63 · 9.9   13 − .2
 14 + 0   64 · 6.0   14 · 0   64 · 4.7   14 − .7
 15 + 0   65 · 9.5   15 · 0   65 · 4.7   15 − .7
 16 + 0   66 : 8.8   16 · 0   66 · 4.7   16 +12.1
 17 + 0   67 : 4.7   17 · 0   67 : 4.7   17 + 1.7
 18 + 0   68 · 5.2   18 · 0   68 : 5.0   18 · 1.6
 19 + 0   69 · 6.5   19 · 0   69 · 6.0   19 + 2.2
 20 · 0   70 : 5.9   20 · 0   70 · 7.0   20 + 1.5
 21 · 0   71 · 3.0   21 · 0   71 · 7.3   21 + 1.9
 22 + 0   72 : 3.9   22 · 0   72 · 6.6   22 − .8
 23 · 0   73 · 6.2   23 · 0   73 · 5.2   23 − 1.4
 24 · 0   74 · 9.1   24 − 1.4   74 · 5.1   24 − 1.7
 25 + 0   75 · 9.0   25 + 0   75 · 5.0   25 − .8
 26 + 0   76 · 8.9   26 · 0   76 · 5.0   26 +17.7
 27 + 0   77 · 8.9   27 · 0   77 · 4.4   27 + .1
 28 + 0   78 · 8.9   28 · 0   78 · 4.3   28 · .1
 29 · 0   79 · 8.4   29 + 0   79 · 4.3   29 · 1.0
 30 + 0   80 · 8.4   30 + .6   80 · 4.3   30 + .1
 31 · 0   81 · 8.4   31 + 0   81 · 4.3
 32 + 0   82 · 8.4   32 + 0   82 · 4.2
 33 + 0   83 · 8.5   33 + 0   83 · 4.6   Seq. 5
 34 + 0   84 + 3.3   34 + 0   84 · 5.6
 35 + 0   85 + 4.6   35 + 0   85 + 5.6
 36 · 0   86 + 5.6   36 · 0   86 · 6.2
 37 − 0   87 + 6.7   37 + .4   87 · 5.3
 38 · 0   88 + 7.4   38 + .6   88 +10.5
 39 + 1.7   89 + 7.4   39 + .9   89 +10.0
 40 + 0   90 + 1.7   40 + 0   90 · 6.5
 41 + 0   91 · 2.9   41 + 0   91 · 6.5
 42 + 0   92 + 3.0   42 + 0   92 · 5.8
 43 + 0   93 + 7.4   43 + 0   93 · 7.9
 44 · 0   94 + 7.1   44 + 0   94 · 6.9
 45 + 0   95 · 7.1   45 + 0   95 · 6.5
 46 · 0   96 + 7.5   46 + 0   96 · 6.5
 47 · 0   97 · 5.4   47 · 0   97 · 6.3
 48 · 0   98 · 4.3   48 ÷ 0   98 · 7.1
 49 + 0   99 · 4.3   49 · 0   99 · 8.4
 50 + 0   100 + .1   50 + 0   100 + .1

2298 .10 30° .15 0 10.0 45.0° 1.049 2050.9 .002319

a)				b)				c)	
1 +	.1	51	.1	1 -	.1	51	.1	1	.2
2 +	.1	52	5.1	2 -	.1	52	5.1	2	1.7
3 +	.1	53	1.7	3 -	.1	53	1.8	3 -	4.8
4 +	.1	54	13.6	4 -	.1	54	6.7	4 -	4.3
5 +	.1	55	10.6	5 -	.1	55	7.0	5 -	4.0
6 +	.1	56	9.8	6 -	.1	56	5.6	6 -	3.1
7 +	.1	57	11.7	7 -	.1	57	6.8	7	19.8
8 +	.1	58	10.8	8 -	.1	58	6.6	8	28.2
9 +	.1	59	7.0	9 -	.1	59	5.7	9	.4
10 +	1.5	60	7.6	10 -	.1	60	5.7	10	3.1
11 +	.1	61	9.0	11	.5	61	6.3	11	.1
12 +	.1	62	8.2	12 -	.1	62	7.7	12 -	1.8
13 +	.1	63	5.4	13 -	.1	63	8.5	13 -	2.4
14 +	.1	64	9.3	14	.1	64	5.2	14 -	2.5
15 +	.1	65	11.8	15	0	65	5.8	15 -	2.6
16 +	.1	66	8.6	16	0	66	6.2	16	12.6
17 +	.1	67	3.9	17	0	67	6.3	17 -	1.6
18	.1	68	8.7	18	0	68	6.3	18	.2
19 +	.1	69	9.5	19	0	69	9.6	19	3.1
20	.1	70	5.7	20	0	70	8.9	20	.1
21	.1	71	3.0	21 -	0	71	8.3	21	.6
22	.1	72	6.6	22 -	0	72	6.4	22	.2
23	.1	73	9.2	23	0	73	6.3	23	.2
24	.1	74	4.6	24 -	0	74	3.5	24	.2
25	.1	75	4.9	25 -	0	75	3.8	25	.1
26	.1	76	10.7	26 -	0	76	4.0	26	5.9
27	.1	77	10.8	27 -	0	77	4.0	27	.1
28	.1	78	3.5	28	0	78	4.5	28	.1
29	.1	79	3.6	29	C	79	6.7	29	.2
30	.1	80	9.6	30	C	80	9.8	30	.2
31	.1	81	10.1	31 -	.1	81	12.9		
32	.1	82	10.4	32 -	.1	82	11.2	Seq. 5	
33	.1	83	5.0	33 -	.1	83	8.0		
34	.1	84	5.7	34 -	.1	84	8.6		
35	.1	85	8.5	35 -	.1	85	9.4		
36	.1	86	6.8	36 -	.1	86	9.8		
37	.1	87	9.7	37 -	.1	87	5.5		
38	.	88	4.0	38 -	.1	88	7.6		
39	.1	89	3.6	39 -	.1	89	4.2		
40 +	.1	90	11.0	40 -	.1	90	7.2		
41 +	.1	91	10.3	41 -	.1	91	9.4		
42 +	.1	92	2.9	42	.1	92	9.2		
43 +	.1	93	10.0	43 -	.1	93	7.5		
44 +	.1	94	7.9	44 -	.1	94	4.8		
45 +	.1	95	7.8	45 -	.1	95	6.7		
46 +	.1	96	9.4	46 -	.1	96	8.8		
47	.1	97	7.5	47 -	.1	97	6.7		
48 +	.1	98	3.3	48 -	.1	98	9.7		
49 +	.1	99	3.7	49 -	.1	99	11.0		
50 +	.1	100	.1	50 -	.1	100 +	.1		

2299 .10 30° .15 0 10.0 ±2.5° 1.049 2050.9 .002319

a)				b)				c)	
1 + 0		51 + .2		1 + 0		51 + .2		1 + .1	
2 + 0		52 + 4.2		2 + 0		52 + 4.4		2 + 1.3	
3 + 0		53 + .9		3 + 0		53 + 1.2		3 - 2.2	
4 + 0		54 +12.5		4 + 0		54 + 6.6		4 - 2.3	
5 + 0		55 +11.1		5 + 0		55 + 7.2		5 - 2.3	
6 + 0		56 + 9.3		6 + 0		56 + 6.5		6 - 2.3	
7 + 0		57 +10.5		7 + 0		57 + 7.8		7 +15.4	
8 + 0		58 +10.0		8 + 0		58 + 8.0		8 +21.9	
9 + 0		59 + 7.2		9 + 0		59 + 7.2		9 + 1.8	
10 + 1.3		60 + 7.4		10 + 0		60 + 7.2		10 + 2.8	
11 + .1		61 + 8.3		11 - 1.2		61 + 7.3		11 + .8	
12 + 0		62 + 8.5		12 - .7		62 + 7.6		12 - .7	
13 + 0		63 + 7.5		13 - .7		63 + 7.8		13 - .7	
14 + 0		64 + 8.9		14 + .3		64 + 4.5		14 - 1.6	
15 + 0		65 +10.8		15 + 0		65 + 5.3		15 - 1.7	
16 + 0		66 + 8.9		16 + 0		66 + 5.7		16 +14.6	
17 + 0		67 + 5.8		17 + 0		67 + 5.8		17 - .9	
18 + 0		68 + 7.6		18 + 0		68 + 8.6		18 + .2	
19 + 0		69 + 8.5		19 + 0		69 +10.1		19 + 3.6	
20 + 0		70 + 5.8		20 + 0		70 +10.0		20 + .1	
21 + 0		71 + 5.6		21 + 0		71 + 7.7		21 + 1.6	
22 + 0		72 + 6.3		22 + 0		72 + 7.2		22 + .1	
23 + 0		73 + 8.3		23 + 0		73 + 7.2		23 - .8	
24 - 0		74 + 7.3		24 + 0		74 + 3.2		24 - .8	
25 - 0		75 + 7.0		25 + 0		75 + 3.8		25 - .8	
26 + 0		76 + 9.1		26 + 0		76 + 4.0		26 +11.3	
27 + 0		77 +10.4		27 + 0		77 + 4.6		27 + .2	
28 + 0		78 + 6.1		28 + 0		78 + 5.8		28 + .2	
29 - 0		79 + 5.7		29 + 0		79 + 8.7		29 + .8	
30 + 0		80 + 8.4		30 + 0		80 +13.5		30 + .1	
31 + 0		81 + 9.4		31 + 0		81 +11.0			
32 + 0		82 + 9.6		32 + 0		82 + 8.8		Seq. 5	
33 + 0		83 + 5.8		33 + 0		83 + 8.2			
34 + 0		84 + 5.8		34 + 0		84 + 8.2			
35 + 0		85 + 6.6		35 + 0		85 + 8.4			
36 + 0		86 + 7.0		36 + 0		86 + 9.0			
37 + 0		87 + 9.0		37 + 0		87 + 9.2			
38 + 0		88 + 3.7		38 + 0		88 + 8.9			
39 + 0		89 + 4.8		39 + 0		89 + 7.5			
40 + 0		90 +11.8		40 + 0		90 + 7.5			
41 + 0		91 + 8.1		41 + 0		91 + 8.3			
42 + 0		92 + 2.5		42 + 0		92 + 8.8			
43 + 0		93 + 9.0		43 + 0		93 + 8.8			
44 + 0		94 + 7.8		44 + 0		94 + 5.9			
45 + 0		95 + 7.6		45 + 0		95 + 6.1			
46 + 0		96 + 8.6		46 + 0		96 + 7.7			
47 + 0		97 + 6.6		47 + 0		97 + 7.9			
48 + 0		98 + 2.3		48 + 0		98 + 9.0			
49 + 0		99 + 2.7		49 + 0		99 +10.3			
50 + 0		100 + .1		50 + 0		100 + .1			

2300   .10   30°   .15   0   10.0   0°   1.049   2050.9   .002319

a)				b)				c)	
1	.1	51	.1	1	0	51	.2	1	.1
2	.1	52	3.5	2	0	52	3.6	2	2.0
3	.1	53	.6	3	0	53	1.2	3	1.0
4	.1	54	9.4	4	0	54	4.6	4	.1
5	.1	55	9.7	5	.1	55	5.1	5	.1
6	.1	56	9.9	6	.2	56	5.0	6	.1
7	.1	57	10.4	7	.2	57	6.3	7	11.7
8	.1	58	9.6	8	.2	58	8.0	8	18.3
9	.1	59	7.7	9	.2	59	9.8	9	3.0
10	.8	60	7.7	10	.2	60	11.2	10	3.5
11	.1	61	8.3	11	1.1	61	8.3	11	2.9
12	.1	62	8.4	12	.1	62	8.7	12	.9
13	.1	63	8.6	13	.2	63	8.8	13	.4
14	.1	64	9.9	14	.8	64	4.6	14	.4
15	.1	65	10.6	15	.1	65	5.4	15	.4
16	.1	66	10.4	16	.2	66	6.0	16	14.7
17	.1	67	8.1	17	.2	67	6.5	17	.2
18	.1	68	8.3	18	.3	68	9.9	18	1.5
19	.1	69	8.5	19	.3	69	10.6	19	3.9
20	.1	70	8.2	20	.3	70	8.0	20	.1
21	.1	71	7.9	21	.2	71	8.0	21	1.1
22	.1	72	7.9	22	.2	72	7.3	22	.1
23	.1	73	7.9	23	.2	73	7.4	23	.8
24	.1	74	8.6	24	1.4	74	3.2	24	.9
25	.1	75	8.8	25	.6	75	3.9	25	1.0
26	.1	76	9.3	26	.3	76	4.9	26	15.1
27	.1	77	9.5	27	.3	77	6.2	27	.1
28	.1	78	8.3	28	.3	78	9.1	28	.1
29	.1	79	8.4	29	.3	79	11.7	29	1.0
30	.1	80	8.4	30	.3	80	11.1	30	.1
31	.1	81	8.8	31	.3	81	7.8		
32	.1	82	9.0	32	.3	82	7.9		
33	.1	83	9.0	33	.3	83	8.1		
34	.1	84	3.2	34	.3	84	8.2		
35	.1	85	6.7	35	.3	85	8.3		
36	.1	86	7.8	36	.2	86	8.5		
37	.1	87	8.2	37	.2	87	8.6		
38	.1	88	3.9	38	.3	88	8.9		
39	.1	89	6.9	39	.3	89	9.9		
40	.1	90	9.2	40	.1	90	6.9		
41	.1	91	8.4	41	.1	91	7.7		
42	.1	92	2.5	42	.1	92	7.9		
43	.1	93	8.7	43	.1	93	8.9		
44	.1	94	8.4	44	.1	94	7.0		
45	1	95	7.6	45	.1	95	7.1		
46	.1	96	7.8	46	.1	96	7.5		
47	.1	97	6.8	47	.1	97	7.7		
48	.1	98	2.4	48	.1	98	8.8		
49	.1	99	2.5	49	0	99	9.4		
50	.1	100	.2	50	0	100	.1		

Seq. 5

2301   .10   30°   .15   0   10.0   -2.5°   1.048   2050.9   .002319

a)				b)				c)		
1	- .1	51	.2	1	0	51	.2	1	.2
2	- .1	52	3.2	2	0	52	3.6	2	1.6
3	- .1	53	1.7	3	0	53	1.4	3	.1
4	- .1	54	7.5	4	0	54	3.7	4	.1
5	- .1	55	7.4	5	0	55	4.2	5	.1
6	- .1	56	3.8	6	- .1	56	4.2	6	.1
7	- .1	57	10.7	7	- .1	57	4.4	7	8.6
8	- .1	58	7.3	8	.1	58	5.0	8	13.0
9	- .1	59	5.6	9	.1	59	6.0	9	2.2
10	+ .6	60	6.9	10	- .1	60	8.8	10	- 2.6
11	- .1	61	8.1	11	- .1	61	12.6	11	2.2
12	- .1	62	6.0	12	0	62	11.5	12	.1
13	- .1	63	6.0	13	0	63	9.2	13	- 3.6
14	- .1	64	9.3	14	0	64	5.1	14	- 3.4
15	- .1	65	10.7	15	0	65	5.1	15	- 1.3
16	- .1	66	9.7	16	.1	66	5.1	16	15.7
17	- .1	67	5.4	17	.1	67	5.1	17	.1
18	- .1	68	7.1	18	.1	68	9.0	18	.3
19	- .1	69	8.0	19	.1	69	11.7	19	2.8
20	- .1	70	7.1	20	.1	70	10.4	20	.4
21	- .1	71	6.4	21	.1	71	7.4	21	1.3
22	- .1	72	6.4	22	.1	72	5.0	22	- 1.6
23	- .1	73	7.5	23	.1	73	5.2	23	- 2.1
24	- .1	74	9.0	24	1.5	74	5.3	24	- 2.2
25	- .1	75	8.4	25	0	75	5.6	25	2.2
26	- .1	76	8.5	26	.1	76	6.1	26	20.2
27	0	77	8.8	27	.1	77	6.3	27	- 1.4
28	0	78	9.3	28	.2	78	6.4	28	.2
29	.1	79	8.9	29	2	79	6.8	29	1.4
30	1	80	8.8	30	.2	80	7.0	30	.1
31	.1	81	8 8	31	.3	81	7.0		
32	.1	82	9.2	32	3	82	7.0		
33	.1	83	8.6	33	.3	83	7.0	Seq. 5	
34	.1	84	3.0	34	.3	84	7.5		
35	.1	85	6.1	35	.3	85	8.6		
36	0	86	7.1	36	0	86	9.3		
37	0	87	8.3	37	.2	87	6.0		
38	0	88	5.4	38	.4	88	8.5		
39	0	89	8.3	39	.5	89	14.8		
40	0	90	5.5	40	0	90	7.0		
41	+ 0	91	5.7	41	0	91	8.4		
42	+ 0	92	2.8	42	0	92	6.4		
43	0	93	7.8	43	0	93	10.9		
44	+ 0	94	7.5	44	0	94	6.9		
45	0	95	- 7.5	45	.1	95	7.0		
46	0	96	7.9	46	- .1	96	7.9		
47	+ 0	97	7.4	47	- .1	97	7.6		
48	0	98	3.1	48	- .1	98	9.2		
49	0	99	3.1	49	- .1	99	10.2		
50	0	100	.1	50	- .1	100	.2		

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              2302   .10   30°   .15   0   10.0   -5.0°   1.048   2050.9   .002319

a)1 +  0      51 +  .1      b)1 +  0      51 +  .2      c)1 +  .1
  2 +  0      52 + 3.0        2 +  0      52 + 3.3        2 + 2.3
  3 +  0      53 +  .3        3 +  .2     53 +  .6        3 + 1.5
  4 +  0      54 + 4.0        4 +  .2     54 + 3.2        4 + 1.5
  5 +  0      55 + 4.2        5 +  .2     55 + 3.8        5 + 1.5
  6 -  .1     56 + 9.0        6 +  .2     56 + 3.6        6 + 1.5
  7 -  .1     57 +10.9        7 +  .2     57 + 3.6        7 + 4.8
  8 -  .1     58 + 7.4        8 +  .3     58 + 3.6        8 + 9.5
  9 +  0      59 + 2.6        9 +  .3     59 + 4.3        9 + 1.4
 10 +  .2     60 + 5.9       10 +  .3     60 + 5.9       10 + 2.3
 11 +  0      61 + 8.3       11 +  .3     61 + 9.7       11 +  .4
 12 +  0      62 + 4.1       12 +  .3     62 +10.8       12 -  .1
 13 +  0      63 + 3.3       13 +  .3     63 +10.7       13 -  .1
 14 +  0      64 + 9.4       14 +  .3     64 + 3.6       14 -  .1
 15 +  0      65 +10.8       15 +  .3     65 + 4.0       15 -  .1
 16 +  0      66 + 7.4       16 +  .3     66 + 4.2       16 +13.5
 17 +  .1     67 + 2.7       17 +  .3     67 + 4.3       17 - 1.0
 18 +  .1     68 + 6.0       18 +  .3     68 + 5.8       18 +  .2
 19 +  .1     69 + 8.1       19 +  .3     69 + 7.9       19 + 3.0
 20 +  .2     70 + 6.5       20 +  .3     70 + 9.5       20 +  .1
 21 +  .2     71 + 4.6       21 +  0      71 + 9.2       21 + 2.0
 22 +  .2     72 + 5.0       22 +  .2     72 + 4.8       22 - 2.7
 23 +  .2     73 + 6.9       23 +  .2     73 + 4.8       23 - 3.0
 24 +  .2     74 + 9.6       24 + 2.2     74 + 4.8       24 - 3.1
 25 +  .2     75 + 7.7       25 +  0      75 + 4.8       25 - 3.1
 26 +  .2     76 + 8.1       26 +  0      76 + 4.8       26 +25.9
 27 +  .2     77 + 8.7       27 +  0      77 + 4.8       27 - 3.8
 28 +  .3     78 + 9.7       28 +  .1     78 + 4.8       28 - 2.9
 29 +  .3     79 + 7.0       29 +  .2     79 + 4.8       29 + 2.9
 30 +  .3     80 + 7.5       30 +  .6     80 + 4.8       30 +  .1
 31 +  .3     81 + 8.0       31 +  0      81 + 5.2
 32 +  .3     82 + 9.1       32 +  0      82 + 5.7       Seq. 5
 33 +  .3     83 + 8.5       33 +  0      83 + 6.4
 34 +  .3     84 + 2.7       34 +  .1     84 + 6.6
 35 +  3      85 + 4.4       35 +  .1     85 + 7.4
 36 +  .3     86 + 6.2       36 +  0      86 + 8.2
 37 +  .3     87 + 8.4       37 +  .4     87 + 3.1
 38 +  .3     88 + 8.5       38 +  .6     88 + 9.9
 39 +  .3     89 + 7.2       39 + 1.0     89 +11.1
 40 +  .3     90 + 2.6       40 +  0      90 + 4.2
 41 +  .3     91 + 5.5       41 -  .1     91 + 7.0
 42 +  .3     92 + 3.1       42 -  .1     92 + 4.7
 43 +  .3     93 + 8.4       43 -  .1     93 + 9.3
 44 +  .3     94 + 8.5       44 -  .1     94 + 6.1
 45 +  .3     95 + 8.3       45 -  .1     95 + 5.7
 46 +  .2     96 + 8.5       46 -  .1     96 + 6.8
 47 +  .2     97 + 7.2       47 -  .1     97 + 6.5
 48 +  .2     98 + 1.9       48 -  .1     98 + 8 4
 49 +  .2     99 + 2.3       49 -  .1     99 + 9.5
 50 +  .2    100 +  .1       50 -  .1    100 +  .1
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2353   .10   30°   .10   0   10.0   +5.0°   1.048   2048.8   .002249

a)				b)				c)	
1 + 0		51 + .2		1 + .1		51 + .1		1 + .1	
2 + 0		52 + 5.7		2 + .1		52 + 4.4		2 + 6.5	
3 + 0		53 + 1.8		3 + .1		53 + 1.1		3 + .1	
4 + 0		54 + 16.0		4 + .1		54 + 7.0		4 + .3	
5 + 0		55 + 12.6		5 + .1		55 + 7.7		5 + .5	
6 + 0		56 + 11.7		6 + .2		56 + 6.7		6 + .8	
7 + 0		57 + 13.0		7 + .3		57 + 8.3		7 + 21.2	
8 + 0		58 + 13.1		8 + .3		58 + 6.5		8 + 29.9	
9 + 0		59 + 8.7		9 + .6		59 + 7.9		9 + 3.0	
10 + .3		60 + 9.6		10 + .7		60 + 6.0		10 + 7.2	
11 + .1		61 + 10.8		11 + 3.4		61 + 8.2		11 + 2.1	
12 + .1		62 + 10.0		12 - .1		62 + 9.3		12 + .6	
13 + 0		63 + 7.9		13 + .1		63 + 9.5		13 + .2	
14 + 0		64 + 11.8		14 + 1.0		64 + 4.5		14 - 1.4	
15 + 0		65 + 13.6		15 + .5		65 + 5.4		15 + .4	
16 + 0		66 + 9.9		16 + .4		66 + 6.4		16 + 16.0	
17 + 0		67 + 8.7		17 + .4		67 + 7.1		17 + .3	
18 + 0		68 + 10.0		18 + .4		68 + 9.8		18 + 2.0	
19 + 0		69 + 11.3		19 + .4		69 + 10.8		19 + 6.7	
20 + 0		70 + 7.5		20 + .4		70 + 10.0		20 + .5	
21 + 0		71 + 7.3		21 + .4		71 + 8.8		21 + 3.0	
22 + 0		72 + 9.2		22 + .4		72 + 8.2		22 + 3.0	
23 + 0		73 + 11.4		23 + .4		73 + 8.4		23 + 2.3	
24 + 0		74 + 6.6		24 + .4		74 + 3.0		24 + 2.2	
25 + 0		75 + 11.8		25 + .4		75 + 3.0		25 + 2.2	
26 + 0		76 + 13.6		26 + .4		76 + 2.9		26 + 8.6	
27 + 0		77 + 13.0		27 + .4		77 + 3.1		27 + 1.5	
28 + 0		78 + 6.6		28 + .4		78 + 5.8		28 + 1.8	
29 + 0		79 + 9.7		29 + .4		79 + 8.9		29 + 2.1	
30 + 0		80 + 12.0		30 + .1		80 + 15.0		30 + .1	
31 - 0		81 + 12.4		31 + .2		81 + 12.9			
32 - .7		82 + 12.5		32 + .2		82 + 10.2		Seq. 5	
33 + .1		83 + 6.2		33 + .3		83 + 10.4			
34 + .1		84 + 7.9		34 + .3		84 + 10.4			
35 + .1		85 + 8.7		35 + .3		85 + 10.9			
36 + .1		86 + 9.9		36 + .3		86 + 11.3			
37 + .1		87 + 12.3		37 + .3		87 + 7.5			
38 + .1		88 + 4.5		38 + .3		88 + 10.1			
39 - 1.7		89 + 5.4		39 + .3		89 + 7.3			
40 + .1		90 + 15.2		40 + .3		90 + 9.2			
41 + .1		91 + 10.8		41 + 0		91 + 10.7			
42 + .1		92 + 3.5		42 + 0		92 + 10.9			
43 + .1		93 + 12.3		43 + 0		93 + 8.1			
44 + .1		94 + 11.4		44 + 0		94 + 7.5			
45 + .1		95 + 10.5		45 + 0		95 + 8.8			
46 + .1		96 + 11.8		46 + 0		96 + 10.7			
47 + .1		97 + 8.9		47 + 0		97 + 9.0			
48 + .1		98 + 3.7		48 + 0		98 + 12.0			
49 + .1		99 + 3.9		49 + 0		99 + 13.2			
50 + .1		100 + .2		50 + 0		100 + .2			

2354 .10 30° .10 0 10.0 +2.5° 1.048 2048.8 .002249

a)				b)				c)	
1	− .1	51	+ .1	1	− .1	51	+ .2	1	+ .1
2	− .1	52	+ 4.3	2	− .1	52	+ 4.7	2	+ 3.0
3	− .1	53	+ .8	3	− .1	53	+ 1.6	3	+ .1
4	− .1	54	+15.1	4	− .1	54	+ 7.0	4	+ .1
5	− .1	55	+13.5	5	− .1	55	+ 8.1	5	+ .2
6	− .1	56	+11.9	6	− .1	56	+ 7.6	6	+ .2
7	− .1	57	+13.0	7	− .1	57	+10.5	7	+17.0
8	− .1	58	+12.9	8	− .1	58	+10.9	8	+24.1
9	− .1	59	+10.1	9	− .1	59	+11.0	9	+ 3.6
10	+ .7	60	+10.2	10	− .1	60	+11.0	10	+ 5.2
11	− .1	61	+10.8	11	+ 1.4	61	+11.0	11	+ 3.5
12	− .1	62	+10.9	12	− .1	62	+11.6	12	+ 1.5
13	− .1	63	+10.6	13	− .1	63	+11.7	13	+ .2
14	− .1	64	+12.0	14	+ .2	64	+ 5.2	14	+ .2
15	− .1	65	+13.1	15	− .1	65	+ 6.1	15	+ .2
16	− .1	66	+11.1	16	− .1	66	7.9	16	+14.9
17	− .1	67	+ 9.8	17	− .1	67	+ 8.4	17	+ 1.3
18	− .1	68	+11.2	18	− .1	68	+11.5	18	+ 2.2
19	− .1	69	+11.4	19	− .1	69	+12.8	19	+ 5.1
20	− .1	70	+ 8.9	20	− .1	70	+11.0	20	+ .1
21	− .1	71	+ 8.8	21	− .1	71	+10.0	21	+ 2.7
22	− .1	72	+ 9.3	22	− .1	72	+10.1	22	+ 2.4
23	− .1	73	+10.7	23	− .1	73	+10.6	23	+ 1.7
24	− .1	74	+10.2	24	− .1	74	+ 4.0	24	+ 1.6
25	− .1	75	+10.8	25	− .1	75	+ 4.2	25	+ 1.6
26	− .1	76	+12.7	26	− .1	76	+ 4.6	26	+12.3
27	− .1	77	+12.9	27	− .1	77	+ 5.9	27	+ 1.8
28	− .1	78	+ 8.8	28	− .1	78	+ 8.5	28	+ 2.1
29	− .1	79	+ 9.8	29	− .1	79	+12.0	29	+ 2.9
30	− .1	80	+11.5	30	− .1	80	+17.5	30	+ .1
31	− .1	81	+11.9	31	− .1	81	+12.3		
32	− .1	82	+12.1	32	− .1	82	+ 1.3	Seq. 5	
33	− .1	83	+ 7.6	33	− .1	83	+11.9		
34	− .1	84	+ 7.3	34	− .1	84	+11.0		
35	− .1	85	+ 9.5	35	− .1	85	+11.8		
36	− .1	86	+10.1	36	− .1	86	+12.1		
37	− .1	87	+11.7	37	− .1	87	+10.9		
38	− .1	88	+ 3.7	38	− .1	88	+12.6		
39	− .1	89	+ 6.4	39	− .1	89	+10.9		
40	− .1	90	+14.6	40	− .1	90	+11.1		
41	− .1	91	+10.1	41	− .1	91	+11.4		
42	− .1	92	+ 2.7	42	− .1	92	+11.6		
43	− .1	93	+11.9	43	− .1	93	+11.7		
44	− .1	94	+11.4	44	− .1	94	+ 9.4		
45	− .1	95	+10.5	45	− .1	95	+10.2		
46	− .1	96	+11.1	46	− .1	96	+11.0		
47	− .1	97	+ 8.5	47	− .1	97	+11.2		
48	− .1	98	+ 2.7	48	− .1	98	+12.8		
49	− .1	99	+ 3.0	49	− .1	99	+13.5		
50	− .1	100	+ .1	50	− .1	100	+ .2		

a)				b)				c)	
1 + .1		51 + .1		1 + .1		51 + .1		1 + .2	
2 + .1		52 + 4.2		2 + .1		52 + 4.2		2 + 3.1	
3 + .1		53 + 1.1		3 + .1		53 + 1.0		3 + .1	
4 + .1		54 + 13.9		4 + .1		54 + 4.8		4 + .1	
5 + .1		55 + 13.9		5 + 0		55 + 5.3		5 + .3	
6 + .1		56 + 13.9		6 + 0		56 + 4.9		6 + .5	
7 + .1		57 + 13.9		7 + 0		57 + 7.5		7 + 13.8	
8 + .1		58 + 12.0		8 + 0		58 + 10.0		8 + 18.5	
9 + .1		59 + 11.0		9 + 0		59 + 3.4		9 + 3.3	
10 + .6		60 + 11.4		10 + 0		60 + 14.3		10 + 4.1	
11 + 0		61 + 11.5		11 + 0		61 + 10.1		11 + 3.6	
12 + 0		62 + 11.6		12 + 0		62 + 11.2		12 + 1.1	
13 + 0		63 + 11.7		13 + 0		63 + 11.7		13 + .1	
14 + 0		64 + 13.4		14 + 0		64 + 4.5		14 + .1	
15 + .1		65 + 13.8		15 + 0		65 + 5.7		15 + .2	
16 + .1		66 + 13.3		16 + 0		66 + 6.6		16 + 14.8	
17 + 0		67 + 10.8		17 + 0		67 + 8.4		17 + 1.2	
18 + 0		68 + 12.3		18 + 0		68 + 12.9		18 + 1.6	
19 + .1		69 + 12.4		19 + 0		69 + 13.6		19 + 6.0	
20 + 0		70 + 10.6		20 + 0		70 + 11.1		20 + .1	
21 + .1		71 + 10.8		21 + 0		71 + 10.3		21 + 2.3	
22 + 0		72 + 10.9		22 + 0		72 + 9.9		22 + 1.7	
23 + 0		73 + 11.1		23 + 0		73 + 10.7		23 + .1	
24 + 0		74 + 11.8		24 + .2		74 + 3.5		24 + .1	
25 + 0		75 + 12.0		25 + .1		75 + 4.5		25 + .1	
26 + 0		76 + 12.7		26 + .1		76 + 5.9		26 + 17.0	
27 + 0		77 + 12.9		27 + .1		77 + 8.4		27 + .6	
28 + 0		78 + 11.0		28 + .1		78 + 10.5		28 + .8	
29 + .1		79 + 11.6		29 + .1		79 + 14.1		29 + 2.3	
30 + .1		80 + 12.2		30 + .1		80 + 12.5		30 + .1	
31 + .1		81 + 12.0		31 + 0		81 + 10.8			
32 + .1		82 + 12.1		32 + 0		82 + 11.3		Seq. 5	
33 + .1		83 + 10.1		33 + 0		83 + 11.7			
34 + .1		84 + 5.7		34 + 0		84 + 11.8			
35 + .1		85 + 10.9		35 + 0		85 + 11.8			
36 + .1		86 + 11.7		36 + 0		86 + 11.9			
37 + .1		87 + 12.1		37 + 0		87 + 10.6			
38 + .1		88 + 4.8		38 + 0		88 + 13.0			
39 + .1		89 + 9.5		39 + 0		89 + 12.8			
40 + .1		90 + 12.3		40 + 0		90 + 10.4			
41 + .1		91 + 11.4		41 + 0		91 + 11.4			
42 + .1		92 + 2.8		42 + 0		92 + 9.9			
43 + .1		93 + 12.0		43 + 0		93 + 12.0			
44 + .1		94 + 11.4		44 + 0		94 + 10.4			
45 + .1		95 + 11.0		45 + 0		95 + 10.6			
46 + .1		96 + 11.5		46 + 0		96 + 11.0			
47 + .1		97 + 9.0		47 + 0		97 + 11.2			
48 + .1		98 + 3.0		48 + 0		98 + 12.7			
49 + .1		99 + 2.3		49 + 0		99 + 13.0			
50 + .1		100 + .1		50 + 0		100 + .1			

2356   .10   30°   .10   0   10.0   -2.5°   1.048   2048.8   .002249

a)				b)				c)	
1	+ .1	51	+ .1	1	+ 0	51	+ .1	1	+ .2
2	+ .1	52	+ 5.0	2	- .1	52	+ 3.7	2	+ 3.7
3	+ .1	53	+ .8	3	- .1	53	+ .9	3	+ .4
4	+ .1	54	+ 11.3	4	- .1	54	+ 3.9	4	+ .6
5	+ .1	55	+ 12.2	5	- .1	55	+ 4.2	5	+ .7
6	+ .1	56	+ 13.1	6	- .1	56	+ 3.1	6	+ .7
7	+ .1	57	+ 14.3	7	- .1	57	+ 4.9	7	+ 10.5
8	+ .1	58	+ 10.4	8	- .1	58	+ 6.7	8	+ 15.2
9	+ .1	59	+ 9.9	9	- .1	59	+ 9.0	9	+ 2.2
10	+ .1	60	+ 10.9	10	- .1	60	+ 13.6	10	+ 3.9
11	+ .3	61	+ 11.8	11	- .1	61	+ 13.7	11	+ 2.7
12	+ 0	62	+ 9.8	12	- .1	62	+ 11.7	12	+ .1
13	+ .3	63	+ 10.7	13	- .1	63	+ 11.7	13	+ .1
14	+ .3	64	+ 13.9	14	- .1	64	+ 4.4	14	+ .1
15	+ 0	65	+ 14.2	15	- .1	65	+ 4.9	15	+ .1
16	+ 0	66	+ 12.6	16	- .1	66	+ 5.7	16	+ 15.0
17	+ 0	67	+ 8.7	17	- .1	67	+ 7.0	17	+ 1.8
18	+ 0	68	+ 10.9	18	- .1	68	+ 11.0	18	+ 1.8
19	+ 0	69	+ 11.5	19	- .1	69	+ 14.1	19	+ 4.0
20	+ 0	70	+ 9.8	20	- .1	70	+ 12.1	20	+ .1
21	+ 0	71	+ 9.8	21	- .1	71	+ 9.7	21	+ 2.3
22	+ 0	72	+ 9.9	22	- .1	72	+ 7.9	22	+ .1
23	+ 0	73	+ 10.7	23	- .1	73	+ 8.8	23	+ .1
24	+ .4	74	+ 12.1	24	- .1	74	+ 4.4	24	+ .1
25	+ .3	75	+ 12.2	25	- .1	75	+ 5.9	25	+ .1
26	+ .3	76	+ 12.2	26	- .1	76	+ 7.7	26	+ 20.6
27	+ .3	77	+ 12.0	27	- .1	77	+ 6.5	27	+ .1
28	+ .3	78	+ 12.7	28	- .1	78	+ 9.1	28	+ .2
29	+ .3	79	+ 11.3	29	- .1	79	+ 9.9	29	+ 2.2
30	+ .5	80	+ 11.4	30	- .1	80	+ 10.3	30	+ .1
31	+ .2	81	+ 11.4	31	- .1	81	+ 10.5		
32	+ .2	82	+ 12.1	32	- .1	82	+ 10.5		
33	+ .2	83	+ 9.1	33	- .1	83	+ 10.6		
34	+ .2	84	+ 4.4	34	- .1	84	+ 11.1		
35	+ .2	85	+ 10.3	35	- .1	85	+ 11.7		
36	+ .2	86	+ 10.5	36	- .1	86	+ 10.9		
37	+ .2	87	+ 11.4	37	- .1	87	+ 7.0		
38	+ .2	88	+ 5.4	38	- .1	88	+ 10.5		
39	+ .3	89	+ 11.0	39	- .1	89	+ 19.2		
40	+ 0	90	+ 9.5	40	- .1	90	+ 10.5		
41	+ 0	91	+ 10.1	41	- .1	91	+ 10.3		
42	+ 0	92	+ 2.6	42	- .1	92	+ 7.5		
43	+ 0	93	+ 11.4	43	- .1	93	+ 14.1		
44	+ 0	94	+ 10.0	44	- .1	94	+ 9.9		
45	+ 0	95	+ 9.9	45	- .1	95	+ 10.5		
46	+ 0	96	+ 10.7	46	- .1	96	+ 1.1		
47	+ 0	97	+ 8.7	47	- .1	97	+ 11.1		
48	+ 0	98	+ 2.7	48	- .1	98	+ 12.3		
49	+ 0	99	+ 3.1	49	- .1	99	+ 13.0		
50	+ 0	100	+ .1	50	- .1	100	+ .2		

Seq. 5

2357 .10 30° .10 0 10.0 -5.0° 1.048 2046.8 .002249

a)				b)				c)	
1	+ 0	51	+ .2	1	+ 0	51	+ .1	1	+ .2
2	+ 0	52	+ 4.1	2	+ 0	52	+ 4.1	2	+ 3.5
3	+ 0	53	+ .6	3	+ 0	53	+ 1.6	3	+ 1.2
4	- 3.3	54	+ 8.1	4	+ 0	54	+ 3.9	4	+ 1.7
5	- .1	55	+11.1	5	+ 0	55	+ 4.1	5	+ 1.9
6	- .1	56	+12.6	6	- .1	56	+ 3.2	6	+ 2.0
7	- .1	57	+13.4	7	- .1	57	+ 3.3	7	+ 6.6
8	- .1	58	+ 7.8	8	- .1	58	+ 4.7	8	+11.3
9	- .1	59	+ 7.9	9	- .1	59	+ 7.6	9	+ 4.0
10	- .1	60	+ 9.8	10	- .1	60	+ 9.7	10	+ 4.6
11	+ 0	61	+10.6	11	- .1	61	+15.9	11	+ 3.8
12	+ 0	62	+ 5.9	12	- .1	62	+12.3	12	+ .1
13	+ 0	63	+ 9.6	13	- .1	63	+10.0	13	+ .1
14	+ 0	64	+12.6	14	- .1	64	+ 3.8	14	+ .1
15	+ 0	65	+13.0	15	- .1	65	+ 4.8	15	+ .1
16	+ 0	66	+10.4	16	- .1	66	+ 5.5	16	+14.5
17	+ 0	67	+ 6.5	17	- .1	67	+ 6.0	17	+ .5
18	+ 0	68	+10.0	18	- .1	68	+ 9.6	18	+ 1.4
19	+ 0	69	+10.7	19	- .1	69	+13.2	19	+ 6.4
20	- .1	70	+ 9.2	20	- .1	70	+13.1	20	+ .1
21	- .1	71	+ 7.1	21	- .1	71	+ 8.4	21	+ 4.1
22	- .1	72	+ 8.8	22	- .1	72	+ 6.3	22	+ .1
23	+ 0	73	+10.0	23	- .1	73	+ 8.1	23	+ .2
24	- .1	74	+11.7	24	+ 1.0	74	+ 5.4	24	+ .2
25	+ 0	75	+11.0	25	+ .4	75	+ 6.3	25	+ .2
26	+ 0	76	+11.0	26	+ .4	76	+ 7.4	26	+28.1
27	+ 0	77	+11.0	27	+ .3	77	+ 7.7	27	+ .1
28	+ 0	78	+12.4	28	+ .3	78	+ 7.8	28	+ .8
29	+ 0	79	+ 9.4	29	+ .3	79	+ 8.1	29	+ 4.0
30	+ 0	80	+ 9.6	30	+ .3	80	+ 8.3	30	+ .1
31	+ 0	81	+10.0	31	+ 0	81	+ 6.5		
32	+ 0	82	+ 1.2	32	+ 0	82	+ 8.9	Seq. 5	
33	+ 0	83	+10.2	33	- .1	83	+ 9.4		
34	+ 0	84	+ 3.9	34	- .1	84	+10.4		
35	+ 0	85	+ 7.5	35	- .1	85	+11.7		
36	+ 0	86	+ 9.7	36	- .1	86	+12.0		
37	+ 0	87	+10.9	37	- .1	87	+ 4.9		
38	+ 0	88	+ 7.1	38	+ 0	88	+10.8		
39	+ 0	89	+ 8.3	39	+ 0	89	+19.6		
40	+ 0	90	+ 7.8	40	- .1	90	+ 9.9		
41	+ 0	91	+ 8.3	41	- .1	91	+11.0		
42	+ 0	92	+ 2.6	42	- .1	92	+ 7.1		
43	+ 0	93	+10.4	43	- .1	93	+13.3		
44	+ 0	94	+10.3	44	- .1	94	+10.1		
45	+ 0	95	+ 9.2	45	- .1	95	+10.3		
46	+ 0	96	+10.3	46	- .1	96	+10.7		
47	+ 0	97	+ 9.0	47	- .1	97	+10.8		
48	+ 0	98	+ 2.6	48	- .1	98	+12.2		
49	+ 0	99	+ 3.0	49	- .1	99	+12.8		
50	+ 0	100	+ .1	50	- .1	100	+ .2		

2398 .10 30° .05 0 10.0 +2.5° 1.048 2046.7 .002249

a)				b)				c)	
1	− .1	51	+ .1	1	− .1	51	+ .1	1	+ .2
2	+ .1	52	+ 4.4	2	− .1	52	+ 4.0	2	+15.3
3	+ .1	53	+ 1.1	3	+ 0	53	+ .6	3	+11.1
4	− 1.1	54	+25.3	4	+ 0	54	+ 6.4	4	+11.4
5	− .6	55	+23.9	5	+ 0	55	+ 9.1	5	+11.5
6	+ 0	56	+23.0	6	+ 0	56	+ 9.2	6	+11.6
7	+ 0	57	+23.8	7	+ 0	57	+15.8	7	+25.3
8	+ 0	58	+23.6	8	+ 0	58	+19.1	8	+34.1
9	+ 0	59	+21.5	9	+ .1	59	+19.7	9	+13.9
10	+ 9.6	60	+21.7	10	− .1	60	+20.1	10	−16.5
11	− 1.8	61	−21.9	11	+ 2.1	61	+20.3	11	+11.9
12	− .7	62	+21.3	12	− .1	62	+21.0	12	+10.3
13	+ 0	63	+21.3	13	+ .1	63	+21.4	13	+ 9.5
14	+ 0	64	+23.5	14	+ .8	64	+ 3.1	14	+ 7.5
15	+ 0	65	+24.2	15	+ .2	65	+ 4.1	15	+ 9.3
16	+ 0	66	+22.1	16	+ .2	66	+ 8.7	16	+24.9
17	+ .1	67	+21.4	17	+ .2	67	+14.5	17	+10.5
18	− .9	68	+21.9	18	+ .2	68	+19.3	18	+11.2
19	− .7	69	+22.1	19	+ .2	69	+20.0	19	+14.5
20	+ .1	70	+18.6	20	+ .2	70	−19.5	20	+ .2
21	+ .1	71	+20.0	21	− .1	71	+19.5	21	+12.1
22	+ .1	72	+20.9	22	− .1	72	+19.7	22	+11.6
23	+ .1	73	+21.5	23	− .1	73	+20.0	23	+ 9.4
24	+ .1	74	+21.4	24	− .1	74	+ 1.8	24	+ 9.4
25	− 1.8	75	+23.0	25	− .1	75	+ 1.2	25	+ 9.4
26	+ 0	76	+23.9	26	+ 0	76	+ .2	26	+21.2
27	+ 0	77	+23.7	27	+ 0	77	+ 8.7	27	+ 8.1
28	+ 0	78	+20.0	28	+ 0	78	+17.5	28	+ 9.9
29	+ 0	79	+22.1	29	+ .1	79	+24.3	29	+10.5
30	+ 0	80	+22.7	30	+ .1	80	+24.6	30	+ .1
31	+ 0	81	+22.7	31	+ .1	81	+21.0		
32	− 3.0	82	+22.7	32	+ .1	82	+22.0		
33	+ .1	83	+15.8	33	+ .1	83	+22.3		
34	+ 0	84	+14.3	34	+ .1	84	+21.2		
35	+ 0	85	+20.9	35	+ .1	85	+21.4		
36	+ .1	86	+22.0	36	+ .1	86	+21.7		
37	+ .1	87	+22.6	37	+ .1	87	+17.9		
38	+ .2	88	+ 2.4	38	+ .1	88	+22.1		
39	− 4.6	89	+13.5	39	+ .1	89	+21.0		
40	+ 0	90	+23.7	40	+ .1	90	+21.0		
41	+ 0	91	+21.6	41	+ .1	91	+21.1		
42	+ 0	92	+ 3.6	42	+ .1	92	+19.1		
43	+ 0	93	+22.4	43	+ .1	93	+19.6		
44	+ 0	94	+22.5	44	+ .1	94	+20.0		
45	+ 0	95	+20.6	45	+ .1	95	+20.2		
46	+ 0	96	+21.8	46	− .1	96	+21.0		
47	+ 0	97	+16.8	47	− .1	97	+20.8		
48	+ 0	98	+ 3.0	48	− .1	98	+21.9		
49	+ 0	99	+ 3.5	49	− .1	99	+22.7		
50	+ 0	100	+ .1	50	− .1	100	+ .2		

Seq. 5

a)				b)				c)	
1	- .2	51	.1	1	0	51	.1	1	.1
2	- .2	52	- 4.6	2	0	52	4.3	2	14.3
3	- .2	53	1.1	3	- .1	53	.9	3	10.2
4	- 2.9	54	23.9	4	- .1	54	3.7	4	10.3
5	.1	55	24.	5	- .1	55	4.5	5	10.3
6	- .1	56	24.8	6	- .1	56	5.0	6	10.3
7	- .1	57	5.1	7	- .1	57	12.6	7	21.7
8	- .1	58	23.6	8	- .1	58	19.9	8	30.2
9	- .1	59	23.1	9	- .1	59	23.4	9	12.3
10	2.2	60	23.1	10	- .1	60	23.7	10	14.8
11	- 2.8	61	23.1	11	- .1	61	21.0	11	13.2
12	- 1.1	62	23.3	12	- .1	62	22.1	12	11.3
13	0	63	23.3	13	- .1	63	22.7	13	9.1
14	0	64	23.0	14	- .1	64	4.3	14	9.2
15	0	65	23.3	15	- .1	65	5.0	15	9.8
16	0	66	25.1	16	- .1	66	9.5	16	24.8
17	0	67	23.4	17	- .1	67	17.1	17	10.1
18	- 2.6	68	23.5	18	- .1	68	22.2	18	11.4
19	- 1.2	69	3.7	19	- .1	69	23.0	19	15.2
20	- .1	70	22.5	20	- .1	70	21.5	20	.3
21	- .1	71	22.5	21	- .1	71	21.5	21	12.8
22	- .2	72	22.6	22	- .1	72	21.7	22	10.0
23	- .2	73	22.9	23	- .1	73	22.2	23	9.8
24	- .2	74	23.3	24	- .1	74	3.4	24	9.8
25	- 1.8	75	23.7	25	+ 0	75	3.4	25	9.8
26	0	76	24.3	26	- .1	76	7.5	26	24.6
27	0	77	24.1	27	0	77	16.2	27	7.7
28	0	78	23.5	28	0	78	20.6	28	9.6
29	- .1	79	23.5	29	0	79	23.6	29	10.4
30	- .1	80	3.5	30	0	80	23.1	30	.1
31	0	81	23.5	31	.1	81	22.8		
32	- 2.8	82	3.5	32	.1	82	22.8		
33	- .2	83	19.2	33	.1	83	23.2		
34	- .2	84	12.7	34	.1	84	23.4		
35	- .2	85	22.5	35	.1	85	23.4		
36	- .2	86	22.9	36	.1	86	23.4		
37	- .2	87	23.3	37	.1	87	19.2		
38	- .2	88	3.9	38	.1	88	23.4		
39	- 2.3	89	17.9	39	.2	89	22.0		
40	- .2	90	21.5	40	.2	90	22.3		
41	- .2	91	22.1	41	0	91	22.7		
42	- .2	92	4.4	42	0	92	19.0		
43	- .2	93	23.0	43	0	93	1.7		
44	- .2	94	23.1	44	0	94	22.2		
45	- .2	95	1.2	45	0	95	22.4		
46	- .2	96	22.7	46	0	96	22.6		
47	- .2	97	17.5	47	0	97	22.8		
48	- .2	98	3.4	48	0	98	23.8		
49	- .2	99	3.5	49	0	99	24.3		
50	- .2	100	.1	50	0	100	.2		

Seq. 5

2400 .10 30° .05 0 10.0 -2.5° 1.048 2046.7 .002249

a)		a)		b)		b)		c)	
1 + .1		51 + .2		1 + 0		51 + .2		1 + .1	
2 + .1		52 + 4.9		2 + 0		52 + 4.4		2 +14.0	
3 + .1		53 + .8		3 + 0		53 + 1.4		3 +10.7	
4 - 6.1		54 +21.0		4 + 0		54 + 3.3		4 +10.2	
5 + .1		55 +25.8		5 + 0		55 + 2.9		5 +10.3	
6 + .2		56 +23.6		6 + 0		56 + 1.9		6 +10.3	
7 + .2		57 +24.1		7 + 0		57 + 2.1		7 +18.3	
8 + .2		58 +20.2		8 + 0		58 +15.0		8 +25.4	
9 + .2		59 +21.0		9 + 0		59 +22.0		9 +12.0	
10 + .5		60 +21.7		10 + 0		60 +27.0		10 +13.8	
11 - 4.4		61 +21.9		11 - 1.9		61 +21.1		11 +13.9	
12 + .1		62 +19.9		12 + .1		62 +22.3		12 + 9.7	
13 + .1		63 +21.3		13 + .1		63 +23.0		13 + 8.4	
14 + .1		64 +23.7		14 - 1.8		64 + 5.0		14 + 8.5	
15 + .1		65 +24.3		15 + 0		65 + 5.5		15 + 9.6	
16 + .1		66 +21.2		16 + 0		66 + 9.2		16 +24.4	
17 + .1		67 +19.6		17 + 0		67 +15.5		17 + 9.7	
18 - 3.5		68 +21.5		18 + 0		68 +22.2		18 +11.3	
19 - .9		69 +21.8		19 + 0		69 +24.2		19 +16.5	
20 + 0		70 +20.6		20 + 0		70 +19.9		20 + .2	
21 + 0		71 +20.6		21 + 0		71 +19.7		21 +14.9	
22 + 0		72 +20.6		22 + 0		72 +19.7		22 +11.1	
23 + 0		73 +20.9		23 + 0		73 +20.4		23 +10.9	
24 + 0		74 +22.3		24 + .4		74 + 5.3		24 +10.9	
25 - 1.8		75 +22.5		25 + .1		75 + 7.5		25 +10.9	
26 + .1		76 +22.6		26 + .1		76 +12.1		26 +30.6	
27 + .1		77 +22.8		27 + .1		77 +16.3		27 + 8.7	
28 + .1		78 + 2.8		28 + .1		78 +18.8		28 +10.9	
29 + .1		79 +22.5		29 + .1		79 +20.7		29 +11.7	
30 + .1		80 +22.5		30 + .1		80 +21.1		30 + .2	
31 + .1		81 +22.5		31 + .2		81 +21.2			
32 - 2.4		82 +22.5		32 + 0		82 +21.3		Seq. 5	
33 + .1		83 +17.2		33 + 0		83 +21.5			
34 + 0		84 +12.5		34 + 0		84 +22.2			
35 + 0		85 +20.4		35 + 0		85 +22.6			
36 + 0		86 +21.1		36 + 0		86 +22.7			
37 + 0		87 +21.9		37 + 0		87 +15.1			
38 + .1		88 + 6.3		38 + .1		88 +22.6			
39 - 1.1		89 +18.1		39 + .1		89 +24.9			
40 + .1		90 +19.3		40 + 0		90 +21.6			
41 + 0		91 +20.3		41 + 0		91 + 2.1			
42 + 0		92 + 3.8		42 + 0		92 +16.8			
43 + 0		93 +21.0		43 + 0		93 +21.3			
44 + 0		94 +21.1		44 + 0		94 +21.6			
45 + 0		95 +20.1		45 + 0		95 + 1.7			
46 + 0		96 +20.8		46 + 0		96 +21.7			
47 + 0		97 +16.3		47 + 0		97 +21.7			
48 + 0		98 + 2.9		48 + 0		98 +22.7			
49 + 0		99 + 3.4		49 + 0		99 +23.2			
50 + 0		100 + .1		50 + 0		100 + .2			

2431   .10   30°   .03   0   10.0   +2.5°   1.048   2052.4   .002296

a)			b)			c)	
1 + 0	51 + .2		1 - .1	51 + .2		1 + .2	
2 + 0	52 + 4.1		2 + 0	52 + 3.8		2 +33.1	
3 + 0	53 + .8		3 + 0	53 + 1.0		3 +29.8	
4 - 3.3	54 +37.5		4 + 0	54 + 7.4		4 +29.8	
5 - 1.2	55 +36.7		5 + 0	55 +12.2		5 +30.0	
6 + 0	56 +35.6		6 + 0	56 -14.0		6 +30.2	
7 + 0	57 +36.4		7 + 0	57 +27.0		7 +38.5	
8 + 0	58 +36.5		8 + 0	58 +32.8		8 +45.5	
9 + 0	59 +34.3		9 + .2	59 +33.0		9 +31.1	
10 -11.0	60 +34.5		10 - .1	60 +34.1		10 +33.8	
11 - 4.3	61 +34.8		11 + 1.9	61 +34.0		11 +27.3	
12 - 1.3	62 +33.7		12 - .1	62 +35.2		12 +27.5	
13 + .1	63 +34.4		13 - .1	63 +35.6		13 +27.5	
14 + .1	64 +36.1		14 + .3	64 + 1.0		14 +23.7	
15 + .1	65 +36.8		15 - .1	65 + .6		15 +25.3	
16 + .1	66 +35.8		16 - .1	66 + 8.7		16 +39.6	
17 + .1	67 +35.4		17 - .1	67 +28.4		17 +26.2	
18 - 3.2	68 +35.4		18 - .1	68 +32.8		18 +27.7	
19 - 1.3	69 +35.3		19 - .1	69 +33.0		19 +30.0	
20 + .1	70 +30.1		20 - .1	70 +33.7		20 + .5	
21 + .1	71 +33.2		21 - .1	71 +33.8		21 +27.5	
22 + .1	72 +33.9		22 - .1	72 +33.9		22 +26.5	
23 + .1	73 +34.4		23 - .1	73 +34.1		23 +26.0	
24 + .1	74 +34.5		24 - 2.2	74 + 1.9		24 +24.4	
25 - 6.8	75 +36.6		25 + 0	75 - 1.6		25 +24.7	
26 - 1.4,	76 +36.6		26 + 0	76 - 7.8		26 +36.0	
27 + .1	77 +35.6		27 + 0	77 - .3		27 +21.2	
28 + .1	78 +31.5		28 + 0	78 +34.6		28 + 5.1	
29 + .1	79 +35.7		29 + 0	79 +40.4		29 +23.5	
30 + .1	80 +35.9		30 + 0	80 +36.2		30 + .1	
31 + .1	81 +35.8		31 + 0	81 +36.0			
32 - 7.4	82 +35.8		32 + 0	82 +36.1		Seq. 5	
33 - 1.0	83 +29.1		33 + 0	83 +36.3			
34 + .1	84 +20.7		34 + 0	84 +36.1			
35 + .1	85 +34.3		35 + 0	85 +36.1			
36 + .1	86 +34.4		36 + 0	86 +36.1			
37 + .1	87 +34.8		37 + 0	87 +31.0			
38 + .1	88 + 1.5		38 + 0	88 +36.7			
39 - 9.8	89 +24.1		39 + 0	89 +35.6			
40 + .1	90 +34.6		40 + 0	90 +35.6			
41 + .1	91 +34.8		41 + 0	91 +35.6			
42 + 0	92 + 4.8		42 + 0	92 +33.4			
43 + 0	93 +35.1		43 + 0	93 +33.6			
44 + 0	94 +35.1		44 + 0	94 +34.3			
45 + 0	95 +32.2		45 + 0	95 +34.5			
46 + 0	96 +34.2		46 + 0	96 +35.0			
47 + 0	97 +27.6		47 + 0	97 +35.0			
48 + 0	98 + 3.7		48 + 0	98 +36.0			
49 + 0	99 + 3.7		49 + 0	99 +37.2			
50 + 0	100 + .2		50 + 0	100 + .1			

2432   .10   30°   .03   0   10.0   0°   1.048   2052.4   .002296

a)		b)		c)
1 + 0	51 + .1	1 + 0	51 + .1	1 + .2
2 + 0	52 + 3.9	2 + 0	52 + 3.8	2 +31.8
3 + 0	53 + .8	3 + 0	53 + .9	3 +28.0
4 - 6.3	54 +38.9	4 + 0	54 + 1.8	4 +28.4
5 - 1.6	55 +39.6	5 + 0	55 + 2.0	5 +28.5
6 + .1	56 +39.7	6 + 0	56 + 3.5	6 +28.5
7 + .1	57 +39.7	7 + 0	57 +23.8	7 +38.7
8 + .1	58 +36.8	8 + 0	58 +35.2	8 +44.2
9 + .1	59 +37.1	9 + 0	59 +37.8	9 +29.8
10 + 2.7	60 +37.5	10 + 0	60 +38.0	10 +32.4
11 - 6.4	61 +37.7	11 - 3.8	61 +38.0	11 +30.7
12 - 1.6	62 +37.8	12 + .1	62 +30.1	12 +27.8
13 + .1	63 +38.0	13 + .1	63 +33.4	13 +27.0
14 + .1	64 +39.0	14 - 2.5	64 + 2.0	14 +26.5
15 + .1	65 +39.7	15 + .2	65 + 2.0	15 +27.0
16 + .1	66 +38.1	16 + .2	66 +12.4	16 +39.8
17 + .1	67 +38.0	17 + .2	67 +30.3	17 +28.5
18 - 6.3	68 +38.2	18 + .2	68 +36.0	18 +28.9
19 - 1.1	69 +38.2	19 + .2	69 +36.9	19 +31.6
20 + .1	70 +36.1	20 + .2	70 +37.0	20 + .2
21 + .1	71 +36.7	21 + .2	71 +37.1	21 +30.7
22 + .1	72 +37.0	22 + .2	72 +37.3	22 +27.0
23 + .1	73 +37.3	23 + .2	73 +37.5	23 +25.8
24 + .1	74 +37.7	24 - 2.5	74 + 1.9	24 +25.8
25 - 6.5	75 +38.6	25 + .2	75 + .2	25 +25.4
26 - 1.2	76 +38.8	26 + .3	76 + 8.6	26 +39.8
27 - 1.0	77 +38.6	27 + .3	77 + 8.6	27 +23.0
28 + .1	78 +37.0	28 + .3	78 +35.9	28 +26.0
29 + .1	79 +37.7	29 + .3	79 +36.9	29 +25.0
30 + .1	80 +37.9	30 + .3	80 +37.2	30 + .1
31 + .1	81 +38.0	31 + .3	81 +37.4	
32 - 6.6	82 +38.0	32 + .3	82 +37.7	
33 - 1.1	83 +33.0	33 + .3	83 +37.9	Seq. 5
34 - .9	84 +22.9	34 + .3	84 +38.1	
35 + .1	85 +37.4	35 + .3	85 +38.1	
36 + .1	86 +37.7	36 + 0	86 +38.1	
37 + .1	87 +37.8	37 + 0	87 +33.7	
38 + .1	88 + 1.3	38 + 0	88 +38.8	
39 - 6.1	89 +31.8	39 + 0	89 +36.0	
40 + .1	90 +35.6	40 + 0	90 +37.0	
41 + .2	91 +37.0	41 + .1	91 +37.6	
42 + .2	92 + 4.8	42 + 0	92 +33.6	
43 + .3	93 +37.9	43 + 0	93 +37.2	
44 + .3	94 +37.2	44 + 0	94 +37.6	
45 + .3	95 +34.8	45 + 0	95 +37.7	
46 + .3	96 +36.6	46 + 0	96 +37.7	
47 + .3	97 +30.2	47 + 0	97 +37.8	
48 + .3	98 + 2.8	48 + 0	98 +38.5	
49 + .3	99 + 3.1	49 + 0	99 +39.1	
50 + .3	100 + .1	50 + 0	100 + .2	

2433 .10 30° .03 0 10.0 -2.5° 1.048 2052.4 .002296

a)			b)			c)	
1 + .1	51 + .2		1 + 0	51 + .1		1 + .3	
2 + .1	52 + 4.8		2 + 0	52 + 4.6		2 +29.9	
3 + .1	53 + 1.2		3 + 0	53 + 1.2		3 +25.7	
4 -10.1	54 +35.0		4 + 0	54 + 2.3		4 +24.9	
5 + .3	55 -38.8		5 + 0	55 + .2		5 +25.1	
6 + .3	56 -39.0		6 + 0	56 - 2.5		6 +25.1	
7 + .3	57 +39.0		7 + 0	57 -17.1		7 +34.4	
8 + .3	58 +33.7		8 + 0	58 +32.1		8 +40.5	
9 + .3	59 35.9		9 + 0	59 -38.5		9 +27.9	
10 - 1.2	60 +36.3		10 + 0	60 +40.5		10 +29.5	
11 - 8.3	61 +36.5		11 - 4.6	61 +33.9		11 +30.1	
12 + .1	62 +36.1		12 + .1	62 +36.7		12 +27.4	
13 + .1	63 +36.6		13 + .1	63 +36.9		13 +25.1	
14 + .3	64 +38.1		14 - 4.1	64 + 2.6		14 +25.1	
15 + .3	65 +38.7		15 + .1	65 + 3.1		15 +27.0	
16 + .4	66 +35.4		16 + .1	66 +12.9		16 +37.4	
17 + .4	67 +35.4		17 + .1	67 +29.1		17 +23.7	
18 - 8.2	68 +36.2		18 + .1	68 +36.3		18 +26.8	
19 - .5	69 +36.4		19 + .1	69 +36.8		19 +33.4	
20 + .1	70 +34.7		20 + .1	70 +34.2		20 + .1	
21 + .1	71 +34.9		21 + .1	71 +34.2		21 +23.7	
22 .2	72 +35.1		22 + .1	72 +34.2		22 +30.6	
23 + .2	73 +35.5		23 + .1	73 +34.8		23 +29.1	
24 + .2	74 +36.5		24 - .4	74 + 5.3		24 +29.2	
25 - 4.4	75 +36.9		25 + .3	75 + 9.6		25 +28.5	
26 + .2	76 +37.0		26 + .3	76 +20.4		26 +42.8	
27 + .2	77 +37.2		27 + .3	77 +29.5		27 +24.9	
28 + .2	78 +37.2		28 + .3	78 +32.3		28 +30.1	
29 + .2	79 +36.7		29 + .3	79 +34.1		29 +27.2	
30 + .2	80 +36.7		30 + .3	80 +34.7		30 + .2	
31 + .2	81 +36.7		31 + .3	81 +34.9			
32 - 5.5	82 +36.7		32 + .3	82 +35.3		Seq. 5	
33 - .8	83 +31.6		33 + .3	83 +35.5			
34 + .2	84 +21.5		34 + .3	84 +36.0			
35 + .2	85 +35.1		35 + .1	85 +36.3			
36 .2	86 +35.5		36 - .9	86 +36.4			
37 .2	87 +36.0		37 + .1	87 +29.9			
38 + .2	88 + 6.7		38 + .1	88 +36.8			
39 - 2.2	89 +31.6		39 + .1	89 +34.2			
40 + .1	90 +34.3		40 + .1	90 +35.2			
41 + .1	91 +34.8		41 .1	91 +35.8			
42 + 0	92 + 5.2		42 + .1	92 +31.0			
43 + 0	93 +36.3		43 + .1	93 +34.6			
44 + 0	94 +36.0		44 + .1	94 +35.2			
45 + 0	95 +32.8		45 + .1	95 +35.4			
46 + 0	96 +35.6		46 + 0	96 +35.5			
47 + 0	97 +29.2		47 + 0	97 +35.5			
48 + 0	98 + 3.4		48 + 0	98 +36.6			
49 + 0	99 + 3.5		49 + 0	99 37.0			
50 + 0	100 + .1		50 + 0	100 + .2			

2454   .10   30°   .01   0   10.0   0°   1.048   2051.6   .002337

a)1	+ 0	51	.3	b)1	−	.1	51	.2	c)1	.1
2	+ 0	52	4.4	2	−	.1	52	4.2	2	65.2
3	+ 0	53	1.5	3	−	.1	53	1.3	3	64.0
4	−11.5	54	67.9	4	−	.1	54	.9	4	64.4
5	− .3	55	68.5	5	−	.1	55	− 4.3	5	64.3
6	+ .1	56	68.1	6	−	.1	56	− 4.4	6	64.1
7	+ .1	57	68.1	7	−	.1	57	48.6	7	66.9
8	+ .1	58	67.0	8	−	.1	58	65.8	8	70.7
9	+ .1	59	67.2	9	−	.1	59	66.2	9	64.8
10	+11.0	60	67.2	10	−	.1	60	66.4	10	65.5
11	−10.6	61	67.2	11	−	7.0	61	66.7	11	65.8
12	− .6	62	67.2	12	0		62	67.2	12	65.0
13	+ .1	63	67.2	13	−	.1	63	67.3	13	64.5
14	+ .1	64	67.8	14	−	7.1	64	.1	14	61.1
15	+ .1	65	68.1	15	0		65	− 4.6	15	63.6
16	+ .1	66	68.0	16	0		66	− 2.4	16	69.3
17	+ .1	67	67.1	17	0		67	63.2	17	64.0
18	−11.3	68	67.2	18	−	0	68	65.8	18	64.9
19	− 1.0	69	67.1	19	0		69	66.0	19	66.1
20	.1	70	65.8	20	0		70	66.2	20	.2
21	.1	71	66.0	21	0		71	66.3	21	64.9
22	.1	72	66.2	22	0		72	66.4	22	62.0
23	0	73	66.2	23	0		73	66.5	23	62.2
24	.1	74	66.8	24	−	5.7	74	.6	24	62.2
25	−11.8	75	67.4	25		.1	75	− 4.3	25	59.2
26	− 1.2	76	67.6	26		.1	76	− 4.3	26	68.1
27	.1	77	67.7	27		.1	77	61.3	27	54.1
28	.1	78	67.1	28		.1	78	− 66.1	28	63.6
29	.1	79	67.1	29		.1	79	66.2	29	55.0
30	.1	80	67.2	30		.1	80	66.3	30	.2
31	.1	81	67.2	31		.1	81	66.4		
32	−11.6	82	67.2	32		.1	82	66.6		
33	− 1.2	83	65.3	33	−	.1	83	66.8	Seq. 5	
34	.1	84	1.8	34		.1	84	66.9		
35	.1	85	66.7	35		.1	85	66.9		
36	.1	86	66.8	36		.3	86	66.9		
37	.1	87	66.8	37		0	87	65.5		
38	.1	88	− 1.6	38	−	0	88	67.8		
39	−11.2	89	63.9	39		0	89	66.6		
40	.1	90	63.9	40		0	90	66.6		
41	+ 0	91	66.1	41	+	0	91	66.6		
42	+ 0	92	8.1	42	+	0	92	64.9		
43	+ 0	93	58.1	43	+	0	93	66.0		
44	+ 0	94	66.5	44	+	0	94	66.2		
45	+ 0	95	62.2	45	+	0	95	66.3		
46	+ 0	96	66.5	46	+	0	96	66.3		
47	+ 0	97	55.7	47	+	0	97	66.3		
48	+ 0	98	3.7	48	+	0	98	66.8		
49	0	99	3.9	49		0	99	67.2		
50	+ 0	100	+ .1	50	+	0	100	+ .2		

2490 .10   0° .25   0   10.0 +2.5° 1.049 2038.2 .002269

a)				b)				c)	
1	+ 0	51	- .2	1	- 0	51	.3	1	.1
2	+ 0	52	- 3.5	2	- 1.0	52	- 3.3	2	-10.3
3	+ 0	53	- 3.6	3	.1	53	- 2.9	3	-21.3
4	+ 0	54	- 2.2	4	.2	54	- 2.1	4	-25.8
5	+ 0	55	- 2.1	5	.2	55	- 2.0	5	-25.7
6	+ 0	56	- 2.1	6	.1	56	- 2.1	6	-23.3
7	+ 0	57	- 2.1	7	.1	57	- 2.3	7	12.9
8	+ 0	58	- 2.1	8	.3	58	- 2.3	8	23.0
9	+ 0	59	- 2.6	9	.6	59	- 2.4	9	-16.6
10	+ 2.3	60	- 2.6	10	.6	60	- 2.4	10	-24.5
11	+ 0	61	- 2.5	11	2.5	61	- 2.4	11	- 8.2
12	+ 0	62	- 3.3	12	+ .1	62	- 2.4	12	-14.8
13	+ 0	63	- 3.2	13	+ .7	63	- 2.4	13	-24.9
14	+ 0	64	- 2.6	14	+ 2.3	64	.3	14	-23.2
15	+ 0	65	- 2.0	15	+ .1	65	.5	15	-17.2
16	+ 0	66	- 2.3	16	+ .4	66	.7	16	4.0
17	+ 0	67	- 2.5	17	+ .5	67	.7	17	+14.3
18	0	68	- 2.2	18	+ .5	68	.6	18	-15.8
19	+ 0	69	- 1.7	19	+ .6	69	- .6	19	-22.5
20	+ 0	70	- 2.2	20	.1	70	- 2.1	20	+ .2
21	0	71	- 2.2	21	0	71	- 2.8	21	- 2.2
22	+ 0	72	- 1.7	22	.1	72	- 2.7	22	- 9.0
23	0	73	- 1.1	23	.7	73	- 2.3	23	-14.8
24	0	74	- 1.6	24	3.7	74	.2	24	-17.9
25	0	75	- 1.4	25	.3	75	.7	25	- 2.6
26	+ 0	76	.2	26	.4	76	1.5	26	1.0
27	.1	77	.4	27	.4	77	3.3	27	1.6
28	.1	78	.2	28	.4	78	3.7	28	- 2.2
29	.1	79	.2	29	.5	79	2.4	29	- 5.4
30	.1	80	.4	30	.7	80	.4	30	.1
31	+ .1	81	1.3	31	+ .2	81	.1		
32	+ .1	82	1.5	32	+ .3	82	.1		
33	+ .1	83	+ 2.9	33	+ .3	83	+ .1	Seq. 5	
34	+ .1	84	.3	34	+ .4	84	.3		
35	+ .1	85	.5	35	+ .4	85	.6		
36	+ .1	86	.6	36	.1	86	.8		
37	+ .1	87	.9	37	+ .3	87	.9		
38	+ .1	88	2.4	38	.5	88	.7		
39	+ .1	89	4.4	39	.9	89	.7		
40	+ .1	90	.8	40	+ 0	90	.7		
41	+ .1	91	.6	41	+ 0	91	.9		
42	+ 0	92	.2	42	+ 0	92	1.6		
43	+ 0	93	1.2	43	+ 0	93	1.1		
44	+ 0	94	1.4	44	+ 0	94	1.0		
45	+ 0	95	1.4	45	+ 0	95	1.1		
46	+ .1	96	1.4	46	+ 0	96	1.2		
47	+ .1	97	1.5	47	+ 0	97	1.3		
48	+ .1	98	.1	48	+ 0	98	1.3		
49	+ .1	99	.1	49	0	99	1.5		
50	+ 0	100	+ .1	50	+ 0	100	+ .1		

a)				b)				c)	
1	+ 0	51	+ .1	1	+ 0	51	+ .2	1	+ .1
2	+ 0	52	- 3.0	2	- .1	52	- 3.4	2	- 8.8
3	+ .0	53	- 3.2	3	- .1	53	- 3.4	3	-15.5
4	+ 0	54	- 3.2	4	- .1	54	- 1.7	4	-24.1
5	+ 0	55	- 3.0	5	- .1	55	- 1.3	5	-25.4
6	+ 0	56	- 2.9	6	- .1	56	- 1.9	6	-16.2
7	+ 0	57	- 2.7	7	- .1	57	- 1.6	7	+ 4.4
8	+ 0	58	- 2.7	8	- .1	58	- 1.5	8	+ 8.9
9	+ 0	59	- 2.7	9	- .1	59	- 1.8	9	- 8.6
10	+ 1.1	60	- 2.7	10	+ 0	60	- 2.0	10	-18.6
11	+ 0	61	- 2.7	11	+ 3.8	61	- 2.7	11	-11.0
12	+ 0	62	- 2.8	12	- .1	62	- 2.7	12	-17.1
13	+ 0	63	- 2.8	13	+ .1	63	- 2.7	13	-25.5
14	+ 0	64	- 2.7	14	+ 2.8	64	+ .3	14	-23.0
15	+ 0	65	- 2.0	15	- .1	65	+ .3	15	-20.8
16	0	66	- 2.4	16	- .1	66	+ .3	16	+ 5.6
17	+ 0	67	- 2.4	17	- .1	67	+ .1	17	+15.2
18	+ 0	68	- 2.2	18	+ 0	68	- .3	18	-17.3
19	+ 0	69	- 2.0	19	+ .1	69	- 1.0	19	-23.4
20	0	70	- 1.9	20	+ .1	70	- 1.5	20	+ .2
21	0	71	- 2.0	21	- .1	71	- 1.5	21	- 9.1
22	+ 0	72	- 1.9	22	- .1	72	- 1.5	22	-16.4
23	0	73	- 1.6	23	+ .4	73	- 1.5	23	-23.8
24	0	74	- 1.6	24	+ 3.1	74	+ .2	24	-24.5
25	+ 0	75	- 1.5	25	+ 0	75	+ .2	25	-14.3
26	- 0	76	.1	26	+ 0	76	.4	26	+ 1.0
27	+ 0	77	.1	27	+ 0	77	.7	27	+ 3.1
28	+ 0	78	.2	28	+ 0	78	.8	28	- 6.8
29	+ 0	79	.2	29	0	79	.9	29	-13.9
30	- 0	80	.4	30	.1	80	.8	30	+ .2
31	+ 0	81	.5	31	+ .2	81	.8		
32	+ 0	82	.5	32	+ .3	82	.8		
33	+ 0	83	1.0	33	.3	83	.8		
34	+ 0	84	.3	34	+ .3	84	+ .8		
35	+ 0	85	.3	35	+ .3	85	.9		
36	+ 0	86	.5	36	+ .2	86	- 1.0		
37	+ 0	87	.7	37	+ .2	87	+ 2.6		
38	+ 0	88	+ 1.6	38	+ .2	88	.6		
39	+ 0	89	2.0	39	+ .4	89	.6		
40	+ 0	90	+ .1	40	- .1	90	.9		
41	+.0	91	.2	41	- .1	91	1.1		
42	+ 0	92	+ .1	42	- .1	92	+ 2.3		
43	+ 0	93	.7	43	- .1	93	1.7		
44	+ 0	94	.9	44	- .1	94	1.7		
45	+ 0	95	1.1	45	- .1	95	1.7		
46	+ 0	96	1.3	46	- .1	96	1.7		
47	+ 0	97	1.3	47	- .1	97	1.7		
48	+ 0	98	+ .2	48	- .1	98	1.7		
49	+ 0	99	+ .2	49	- .1	99	1.7		
50	+ 0	100	+ .2	50	- .1	100	+ .1		

Seq. 5

```
2492   .10   0°  .25   0   10.0  -2.5°  1.049   2038.2   .002269

a) 1 -  .1      51 +  .2     b) 1 +  .1      51 +  .2     c) 1 +  .1
   2 -  .1      52 - 3.0        2 +  .3      52 - 3.4        2 -  2.6
   3 -  .1      53 - 3.4        3 +  .4      53 - 3.4        3 -  8.8
   4 -  .1      54 - 3.4        4 +  .4      54 - 1.9        4 -16.2
   5 -  .1      55 - 3.3        5 +  .5      55 +  .3        5 -19.3
   6 -  .1      56 - 3.2        6 +  .5      56 -  .6        6 -  4.4
   7 -  .1      57 - 2.9        7 +  .5      57 +  .5        7 + 2.4
   8 -  .1      58 - 2.8        8 +  .6      58 +  .7        8 + 4.4
   9 -  .1      59 - 3.0        9 +  .7      59 +  .8        9 +  .1
  10 +  .7      60 - 2.9       10 + 1.2      60 -  .5       10 -10.4
  11 -  .1      61 - 2.7       11 + 4.2      61 - 2.4       11 -10.2
  12 -  .1      62 - 3.1       12 +  .1      62 - 2.4       12 -17.4
  13 -  .1      63 - 3.1       13 +  .9      63 - 2.4       13 - 4.7
  14 -  .1      64 - 2.9       14 + 3.1      64 -  .6       14 -22.9
  15 -  .1      65 - 1.0       15 +  .6      65 +  .5       15 -21.2
  16 -  .1      66 - 2.9       16 +  .4      66 +  .6       16 + 7.2
  17 -  .1      67 - 2.9       17 +  .6      67 -  .2       17 +16.3
  18 -  .1      68 - 2.5       18 +  .6      68 -  .2       18 -20.4
  19 -  .1      69 - 2.1       19 +  .6      69 -  .4       19 -25.0
  20 -  .1      70 - 2.1       20 +  .7      70 - 1.3       20 +  .1
  21 -  .1      71 - 2.4       21 +  .4      71 - 1.3       21 -13.4
  22 -  .1      72 - 2.3       22 +  .4      72 - 1.4       22 -22.8
  23 -  .1      73 - 1.8       23 +  .8      73 - 1.3       23 -30.5
  24 -  .1      74 - 1.7       24 + 3.7      74 -  .9       24 -29.5
  25 -  .1      75 - 1.6       25 +  .3      75 -  .6       25 -25.5
  26 -  .1      76 +  .1       26 +  .4      76 -  .5       26 + 7.9
  27 -  .1      77 +  .2       27 +  .4      77 -  .4       27 +13.3
  28 -  .1      78 +  .4       28 +  .4      78 -  .2       28 -13.8
  29 -  .1      79 +  .4       29 +  .5      79 +  .2       29 -22.8
  30 +  0       80 +  .4       30 + 0        80 +  .3       30 +  .1
  31 +  0       81 +  .5       31 +  .3      81 +  .5
  32 +  0       82 +  .7       32 +  .3      82 +  .5       Seq. 5
  33 +  0       83 + 1.4       33 +  .4      83 +  .6
  34 +  0       84 +  .7       34 +  .4      84 +  .6
  35 +  0       85 +  .7       35 +  .4      85 + 1.0
  36 +  0       86 +  .8       36 +  .1      86 + 1.2
  37 +  0       87 +  .7       37 +  .5      87 + 4.8
  38 +  0       88 + 1.2       38 +  .8      88 +  .7
  39 +  0       89 + 1.3       39 + 1.1      89 + 1.6
  40 +  0       90 +  .9       40 + 0        90 + 1.7
  41 +  0       91 +  .9       41 + 0        91 + 1.7
  42 +  0       92 +  .1       42 +  .1      92 + 4.4
  43 +  0       93 +  .7       43 +  .1      93 + 1.0
  44 +  0       94 +  .9       44 +  .1      94 + 1.1
  45 +  0       95 +  .9       45 +  .1      95 + 1.3
  46 -  .1      96 + 1.1       46 + 0        96 + 1.6
  47 -  .1      97 + 1.2       47 + 0        97 + 1.7
  48 -  .1      98 +  .3       48 + 0        98 + 1.8
  49 -  .1      99 +  .3       49 + 0        99 + 1.9
  50 -  .1     100 +  .1       50 + 0       100 +  .2
```

2533   .10   0°   .15   0   10.0   +5.0°   1.049   2056.6   .002333

a)		b)		c)	
1 + 0	51 + .1	1 + 0	51 + .1	1 + .1	
2 + 0	52 - 3.2	2 + .1	52 - 3.6	2 -12.0	
3 + 0	53 - 3.5	3 + .1	53 - 3.6	3 -23.0	
4 - .9	54 + .2	4 + .1	54 - 2.2	4 -22.0	
5 + 0	55 - .2	5 + .1	55 - 1.9	5 -21.4	
6 + 0	56 - .9	6 + .1	56 - 2.5	6 -17.0	
7 + 0	57 - .9	7 + .1	57 - 2.5	7 +20.8	
8 + 0	58 - .9	8 + .1	58 - 2.4	8 +30.9	
9 + 0	59 - 2.3	9 + .1	59 - 2.4	9 -16.1	
10 + 1.1	60 - 1.5	10 + 1	60 - 2.4	10 -19.5	
11 - .1	61 - 1.3	11 + 1.6	61 - 2.5	11 - 7.8	
12 - .1	62 - 2.2	12 - .8	62 - 2.4	12 -14.8	
13 - .1	63 - 2.0	13 + 0	63 - 2.3	13 -26.0	
14 - .1	64 - 1.2	14 + 2.3	64 - 1.4	14 -21.4	
15 - .1	65 - .4	15 - .1	65 + .3	15 -15.7	
16 - .1	66 - 2.3	16 - .1	66 + 1.0	16 + 5.1	
17 - .1	67 - 2.5	17 - .1	67 + 1.8	17 +16.0	
18 - .1	68 - 1.1	18 - .1	68 + 2.2	18 -15.5	
19 - .1	69 + 3	19 - .1	69 + .7	19 -21.6	
20 - .1	70 - 2.2	20 - .1	70 - 2.4	20 + .2	
21 - .1	71 - 2.0	21 - .1	71 - 2.9	21 - 2.1	
22 + 0	72 + .3	22 - .1	72 - 2.8	22 - 5.8	
23 + 0	73 + .4	23 - .1	73 - 1.8	23 - 8.7	
24 + 0	74 - 2.4	24 + 1.5	74 - 1.9	24 -11.4	
25 + 0	75 - 1.9	25 + 0	75 - 1.8	25 + .2	
26 + 0	76 + .6	26 + .1	76 - .9	26 + .9	
27 + 0	77 + 1.6	27 + .1	77 + 1.9	27 + 1.2	
28 + 0	78 - 1.8	28 + .1	78 + 4.9	28 - 1.8	
29 + 0	79 - .6	29 + .1	79 + 7.6	29 - 2.6	
30 + 0	80 + 1.6	30 + .1	80 + 9.0	30 + .2	
31 + 0	81 + 2.1	31 + 0	81 + 2.1		
32 + 0	82 + 2.3	32 + 0	82 + .7	Seq. 5	
33 + 0	83 + 7.8	33 + .1	83 + .7		
34 + 0	84 + 2.8	34 + .1	84 + 1.3		
35 + 0	85 + .4	35 + 0	85 + 1.7		
36 + 0	86 + 1.2	36 + 0	86 + 2.0		
37 + 0	87 + 2.1	37 - .1	87 + .4		
38 + 0	88 + .3	38 - .1	88 + .7		
39 - .8	89 + 4.5	39 - .1	89 + .6		
40 + 0	90 + 9.1	40 - .1	90 + 1.5		
41 + 0	91 + .2	41 - .1	91 + 1.9		
42 + 0	92 + .1	42 - .1	92 + 2.1		
43 + 0	93 + .9	43 - .1	93 + .3		
44 + 0	94 + 1.4	44 - .1	94 + .8		
45 + 0	95 + 2.0	45 - .1	95 + 1.5		
46 + 0	96 + 2.5	46 - .1	96 + 2.0		
47 + 0	97 + 2.1	47 - .1	97 + 1.7		
48 + 0	98 + .1	48 - .1	98 + 2.0		
49 + 0	99 + .2	49 - .1	99 + 2.2		
50 + 0	100 + .2	50 - .1	100 + .1		

2534　　.10　　0°　　.15　　0　　10.0　　+2.5°　　1.048　　2056.6　　.002333

a)			a)			b)			b)			c)		
1	+	.1	51	+	.3	1	+	0	51	+	.1	1	+	.2
2	+	.2	52	-	3 2	2	+	.1	52	-	3.0	2	-	11.4
3	+	.2	53	-	3.5	3	+	.1	53	-	3.3	3	-	20.0
4	-	1.4	54	-	.8	4	+	.1	54	-	1.4	4	-	24.5
5	+	.1	55	-	.8	5	+	1	55	-	.9	5	-	24.6
6	+	.1	56	-	1.5	6	+	.2	56	-	2.0	6	-	20.2
7	+	.1	57	-	1.2	7	+	.2	57	-	1.6	7	+	13.1
8	+	.1	58	-	1.2	8	+	.2	58	-	1.3	8	+	23.9
9	+	.1	59	-	1.8	9	+	.2	59	-	1.6	9	-	15.2
10	+	.3	60	-	1.5	10	+	.5	60	-	1.5	10	-	23.7
11	+	.1	61	-	1.6	11	+	3.1	61	-	1.6	11	-	7.5
12	+	.1	62	-	2.3	12	-	.1	62	-	1.6	12	-	14.1
13	+	0	63	-	1.8	13	+	.2	63	-	1.3	13	-	25.2
14	+	0	64	-	1.4	14	+	2.6	64	-	.6	14	-	21.2
15	+	0	65	-	1.1	15	+	.2	65	+	1.0	15	-	13.7
16	+	0	66	-	1.7	16	+	.4	66	+	.6	16	+	4.6
17	+	0	67	-	1.6	17	+	.4	67	+	2.1	17	+	13.3
18	+	0	68	-	1.1	18	+	.4	68	+	2.3	18	-	13.7
19	+	0	69	-	.8	19	+	.4	69	+	.7	19	-	20.9
20	+	0	70	-	1.7	20	+	.4	70	-	1.2	20	+	.2
21	+	0	71	-	1.4	21	+	.1	71	-	1.5	21	-	2.9
22	+	0	72	-	.7	22	+	.2	72	-	1.2	22	-	8 4
23	+	0	73	-	.3	23	+	.4	73	-	.6	23	-	14.4
24	+	0	74	-	1.3	24	+	3.4	74	-	1.1	24	-	16.7
25	+	0	75	-	.6	25	+	.1	75	+	.4	25	-	2.2
26	+	0	76	+	.5	26	+	.2	76	+	2.2	26	+	1.9
27	+	0	77	+	1.1	27	+	.3	77	+	4.4	27	+	2.5
28	+	0	78	+	.1	28	+	.4	78	+	5.0	28	-	1.9
29	+	0	79	+	.5	29	+	.4	79	+	5.1	29	-	5.1
30	+	0	80	+	1.3	30	+	.4	80	+	3.0	30	+	.2
31	+	0	81	+	1.6	31	+	.4	81	+	1.1			
32	+	0	82	+	1.8	32	+	.4	82	+	1.2			
33	+	0	83	+	5.7	33	+	.4	83	+	1.2			
34	+	0	84	+	1.0	34	+	.4	84	+	1.9			
35	+	0	85	+	1.4	35	+	.4	85	+	2.3			
36	+	.1	86	+	1.7	36	-	.1	86	+	2.4			
37	+	.1	87	+	1.9	37	+	0	87	+	2.7			
38	+	.1	88	+	1.8	38	+	.1	88	+	1.7			
39	+	.1	89	+	6.3	39	+	.1	89	+	1.8			
40	+	.1	90	+	2.8	40	+	.1	90	+	2.1			
41	+	.1	91	+	.9	41	+	0	91	+	2.3			
42	+	.1	92	+	.1	42	+	.1	92	+	3.3			
43	+	.1	93	+	1.2	43	+	.1	93	+	1.8			
44	+	.1	94	+	1.8	44	+	.2	94	+	2.0			
45	+	.2	95	+	2.1	45	+	.2	95	+	2.1			
46	+	.2	96	+	2.0	46	+	0	96	+	2.5			
47	+	.2	97	+	1.9	47	+	.1	97	+	2.2			
48	+	.2	98	+	.1	48	+	.1	98	+	2.5			
49	+	.2	99	+	.1	49	+	.1	99	+	2.6			
50	+	.2	100	+	.1	50	+	.1	100	+	.1			

Seq. 5

2535 .10   0°   .15   0   10.0   0°   1.048   2056.6   .002333

a)				b)				c)	
1 +	.1	51 +	.1	1 + 0		51 +	.1	1 +	.1
2 +	.3	52 -	3.1	2 + 0		52 -	2.8	2 -	6.7
3 +	.3	53 -	3.6	3 + 0		53 -	3.6	3 -	13.7
4 +	.3	54 -	.8	4 + 0		54 -	1.5	4 -	20.7
5 +	.3	55 -	.6	5 + 0		55 -	.8	5 -	22.6
6 +	.3	56 -	1.1	6 + 0		56 -	1.4	6 -	12.5
7 +	.3	57 -	.8	7 + 0		57 -	.4	7 +	5.2
8 +	.3	58 -	1.4	8 + 0		58 -	.2	8 +	11.4
9 +	.3	59 -	1.9	9 + 0		59 -	.7	9 -	5.7
10 +	.4	60 -	1.2	10 + 0		60 -	1.4	10 -	17.4
11 +	.1	61 -	1.2	11 +	3.8	61 -	1.8	11 -	7.6
12 +	.1	62 -	2.0	12 -	.1	62 -	1.7	12 -	15.1
13 +	.1	63 -	1.5	13 +	.1	63 -	1.4	13 -	23.0
14 +	.2	64 -	.7	14 +	2.5	64 -	1.1	14 -	19.1
15 +	.2	65 -	.5	15 -	.1	65 +	.2	15 -	16.4
16 + 0		66 -	1.5	16 -	.1	66 +	1.3	16 +	6.0
17 +	.2	67 -	1.3	17 -	.1	67 +	1.7	17 +	16.3
18 +	.1	68 -	.3	18 +	.1	68 +	1.2	18 -	13.7
19 +	.1	69 -	.2	19 +	.1	69 +	.3	19 -	19.9
20 +	.1	70 -	1.1	20 + 0		70 -	.8	20 +	.2
21 +	.2	71 -	.8	21 + 0		71 -	1.0	21 -	6.9
22 +	.2	72 -	.4	22 +	.2	72 -	.6	22 -	13.3
23 +	.2	73 +	.7	23 +	.3	73 -	.4	23 -	21.1
24 +	.3	74 +	.1	24 +	3.2	74 -	.8	24 -	23.3
25 +	.3	75 +	.3	25 +	.1	75 +	.4	25 -	9.6
26 +	.3	76 +	.5	26 + 0		76 +	1.1	26 +	3.4
27 +	.3	77 +	1.3	27 + 0		77 +	1.8	27 +	5.3
28 +	.3	78 +	1.0	28 + 0		78 +	2.0	28 -	5.8
29 +	.3	79 +	1.1	29 +	.1	79 +	1.8	29 -	10.3
30 +	.3	80 +	1.6	30 +	.1	80 +	1.3	30 +	.2
31 +	.3	81 +	1.8	31 +	.1	81 +	1.0		
32 +	.3	82 +	1.9	32 +	.3	82 +	1.5	Seq. 5	
33 +	.3	83 +	4.1	33 +	.3	83 +	1.7		
34 +	.3	84 +	.9	34 +	.3	84 +	1.9		
35 +	.3	85 +	1.7	35 +	.3	85 +	2.1		
36 +	.3	86 +	2.0	36 -	.1	86 +	2.2		
37 +	.3	87 +	2.4	37 + 0		87 +	5.4		
38 +	.3	88 +	2.2	38 + 0		88 +	1.7		
39 +	.3	89 +	4.9	39 + 0		89 +	2.0		
40 +	.3	90 +	2.2	40 + 0		90 +	2.2		
41 +	.1	91 +	2.0	41 -	.1	91 +	2.3		
42 +	.1	92 +	.1	42 -	.1	92 +	4.8		
43 +	.1	93 +	2.4	43 -	.1	93 +	2.0		
44 +	.1	94 +	2.6	44 + 0		94 +	1.9		
45 +	.1	95 +	2.7	45 + 0		95 +	2.4		
46 +	.1	96 +	2.8	46 + 0		96 +	2.6		
47 +	.1	97 +	2.0	47 + 0		97 +	2.4		
48 +	.1	98 +	.1	48 + 0		98 +	2.5		
49 +	.1	99 +	.2	49 + 0		99 +	2.4		
50 +	.1	100 +	.2	50 + 0		100 +	.1		

```
          2536   .10   0°   .15   0   10.0   -2.5°   1.048   2056.6   .002333
```

a)			b)			c)	
1 + 0	51 + .1		1 + .2	51 + .1		1 + .1
2 + 0	52 - 3.4		2 + .2	52 - 3.5		2 - 2.8
3 + 0	53 - 3.9		3 + .2	53 - 3.6		3 - 8.8
4 + 0	54 - 2.0		4 + .2	54 - 2.4		4 -14.7
5 + 0	55 - 1.2		5 + .2	55 - 1.3		5 -18.0
6 + 0	56 - 1.2		6 + .2	56 - 1.8		6 - 3.4
7 + 0	57 - 1.1		7 + .2	57 + .4		7 + 4.0
8 + 0	58 - 2.3		8 + .2	58 + 1.9		8 + 6.1
9 + .2	59 - 2.2		9 + .2	59 + 2.1		9 - .7
10 + .4	60 - 1.6		10 + .2	60 + 1.0		10 - 8.8
11 - .1	61 - 1.4		11 + 2.4	61 - 1.1		11 - 8.5
12 - .1	62 - 2.4		12 + 0	62 - 2.1		12 -17.2
13 - .1	63 - 1.8		13 + .2	63 - 2.2		13 -24.5
14 - .1	64 - 1.2		14 + 2.4	64 - 1.4		14 -19.1
15 + 0	65 - 1.0		15 + .2	65 + .2		15 -18.4
16 + 0	66 - 1.9		16 + .1	66 + .6		16 + 7.9
17 + 0	67 - 1.6		17 + .1	67 + 1.1		17 +17.7
18 + 0	68 - .7		18 + .1	68 + 1.3		18 -17.2
19 + 0	69 + .3		19 + .2	69 + .2		19 -23.7
20 + .1	70 - 1.3		20 + .2	70 - 1.2		20 + .2
21 + 0	71 - 1.3		21 + .1	71 - 1.6		21 -10.4
22 + 0	72 + .1		22 + .1	72 - .8		22 -21.0
23 + 0	73 + .1		23 + .2	73 - .5		23 -27.8
24 + .1	74 + .1		24 + 3.3	74 - .5		24 -26.6
25 + .1	75 + 1		25 + .1	75 - .5		25 -20.7
26 + 0	76 + .2		26 + .2	76 + .2		26 + 8.5
27 + 0	77 + .8		27 + .3	77 + .5		27 +14.0
28 + .1	78 + 1.0		28 + .2	78 + .7		28 -13.0
29 + .1	79 + 1.1		29 + .3	79 + 1.0		29 -20.8
30 + .1	80 + 1.3		30 + .3	80 + 1.2		30 + .2
31 - .1	81 + 1.4		31 + .3	81 + 1.2		
32 + 0	82 + 1.5		32 + .3	82 + 1.3		Seq. 5
33 + 0	83 + 2.8		33 + .3	83 + 1.4		
34 + 0	84 + .6		34 + .3	84 + 1.5		
35 + 0	85 + 1.2		35 + .3	85 + 1.7		
36 + 0	86 + 1.6		36 + .3	86 + 1.7		
37 + 0	87 + 1.9		37 + .3	87 + 7.8		
38 + 0	88 + 2.0		38 + .3	88 + 1.3		
39 + 0	89 + 2.3		39 + .7	89 + 3.5		
40 + 0	90 + 1.1		40 + 0	90 + 1.9		
41 + .1	91 + 1.6		41 + .1	91 + 1.9		
42 + .1	92 + .1		42 + .1	92 + 6.0		
43 + .1	93 + 1.9		43 + .1	93 + 2.2		
44 + .1	94 + 1.9		44 + .1	94 + 1.3		
45 + .1	95 + 2.0		45 + .1	95 + 1.9		
46 + 0	96 + 2.0		46 + .1	96 + 2.0		
47 + 0	97 + 1.6		47 + .1	97 + 2.2		
48 + 0	98 + .2		48 + .1	98 + 2.2		
49 + 0	99 + .2		49 + .1	99 + 2.3		
50 + 0	100 + .1		50 + .1	100 + .1		

2537 .10 0° .15 0 10.0 -5.0° 1.048 2056.6 .002333

a)				b)				c)	
1	-	.1	51	+	.1	1	+	0	51	+	.2	c) 1	+	.1

a)
```
1  -  .1      51 +  .1
2  -  .1      52 - 3.5
3  +  0       53 - 3.8
4  +  0       54 - 3.7
5  +  0       55 - 2.6
6  -  .1      56 - 1.5
7  +  0       57 -  .9
8  +  .1      58 - 3.6
9  +  .2      59 - 3.5
10 +  .3      60 - 1.9
11 +  0       61 - 1.3
12 +  0       62 - 3.4
13 +  0       63 - 2.8
14 +  .1      64 - 1.6
15 +  .2      65 -  .8
16 +  .2      66 - 3.0
17 +  .2      67 - 2.4
18 +  0       68 - 1.0
19 +  0       69 -  .6
20 +  0       70 - 1.8
21 +  0       71 - 1.8
22 +  0       72 -  .9
23 +  .1      73 -  .4
24 +  .1      74 -  .3
25 +  .1      75 -  .7
26 +  .1      76 +  .4
27 +  .1      77 + 1.4
28 +  .1      78 + 1.8
29 +  .1      79 +  .8
30 +  .2      80 +  .9
31 +  .2      81 + 2.1
32 +  .2      82 + 1.8
33 +  .1      83 +  .1
34 +  .1      84 +  .4
35 +  .2      85 +  .6
36 -  .1      86 + 1.8
37 +  0       87 + 1.3
38 +  0       88 + 1.3
39 +  0       89 +  6
40 +  0       90 + 1.0
41 +  .1      91 +  .1
42 +  .1      92 + 1.9
43 +  .1      93 + 1.7
44 +  .1      94 + 1.6
45 +  .1      95 + 2.1
46 -  .1      96 + 1.8
47 +  0       97 +  .1
48 +  0       98 +  .1
49 +  0       99 +  .1
50 +  0      100 +  .1
```

b)
```
1  +  0       51 +  .2
2  +  0       52 - 3.9
3  +  0       53 - 4.2
4  +  0       54 - 3.3
5  +  0       55 - 2.4
6  +  0       56 - 2.9
7  -  .1      57 - 1.6
8  -  .1      58 + 1.3
9  -  .1      59 + 3.7
10 -  .1      60 + 5.4
11 +  .2      61 +  .5
12 +  0       62 - 1.7
13 +  0       63 - 2.9
14 +  .6      64 - 1.6
15 +  0       65 +  .2
16 -  .1      66 +  .9
17 -  .1      67 + 2.3
18 -  .1      68 + 2.5
19 -  .1      69 +  .4
20 -  .1      70 - 1.9
21 -  .1      71 - 2.4
22 -  .1      72 - 2.2
23 -  .1      73 - 1.7
24 + 1.6      74 - 1.6
25 -  .1      75 - 1.5
26 -  .1      76 - 1.1
27 -  .1      77 +  .2
28 -  .1      78 +  .2
29 -  .1      79 +  .2
30 +  .2      80 +  .2
31 +  0       81 +  .2
32 +  0       82 +  .4
33 +  0       83 +  .6
34 +  0       84 +  .7
35 +  0       85 + 1.1
36 +  0       86 + 1.5
37 +  0       87 + 7.5
38 +  .1      88 +  .1
39 +  .2      89 + 9.4
40 +  0       90 + 1.1
41 +  0       91 + 1.8
42 -  .1      92 + 5.6
43 -  .1      93 + 4.2
44 -  .1      94 +  .1
45 -  .1      95 + 1.3
46 -  .1      96 + 2.4
47 -  .1      97 + 1.4
48 -  .1      98 + 1.9
49 -  .1      99 + 2.1
50 -  .1     100 +  .1
```

c)
```
1  +  .1
2  -  .9
3  - 6.0
4  - 9.3
5  -12.0
6  +  .2
7  + 2.5
8  + 3.2
9  +  .2
10 - 5.3
11 -10.0
12 -17.1
13 -25.7
14 -21.5
15 -18.7
16 + 7.6
17 +17.8
18 -19.9
19 -24.2
20 +  .2
21 -13.4
22 -25.4
23 -24.6
24 -23.9
25 -19.9
26 +18.2
27 +21.4
28 -19.5
29 -19.3
30 +  .2
```

Seq. 5

2588 .10 0° .10 0 10.0 +5.0° 1.048 2061.5 .002316

a)

n		val		n		val
1	+	0		51	+	.1
2	+	0		52	-	2.9
3	+	0		53	-	3.6
4	-	1.2		54	+	1.9
5	+	0		55	+	.6
6	+	0		56	+	.2
7	+	0		57	+	.2
8	+	0		58	+	.2
9	+	0		59	-	.3
10	+	0		60	-	.5
11	+	0		61	-	.4
12	+	0		62	-	1.4
13	+	0		63	-	1.2
14	+	0		64	+	.3
15	+	0		65	+	.6
16	-	.1		66	-	1.6
17	-	.1		67	-	1.1
18	-	.1		68	+	.4
19	-	.1		69	+	.9
20	-	.1		70	-	1.8
21	-	.1		71	+	.4
22	-	.1		72	+	1.6
23	-	.1		73	+	1.6
24	-	.1		74	-	1.8
25	+	0		75	+	1.2
26	+	0		76	+	2.3
27	+	0		77	+	2.9
28	-	.1		78	-	1.5
29	+	0		79	+	2.3
30	+	.1		80	+	3.6
31	+	.1		81	+	3.6
32	-	2.2		82	+	3.6
33	+	0		83	+	8.6
34	+	0		84	+	4.7
35	+	0		85	+	2.0
36	+	0		86	+	2.9
37	-	.1		87	+	3.4
38	-	.1		88	-	.2
39	-	1.7		89	+	2.9
40	+	0		90	+	11.5
41	+	0		91	+	2.2
42	+	0		92	+	.7
43	+	0		93	+	4.4
44	+	0		94	+	3.8
45	+	0		95	+	3.9
46	+	0		96	+	4.0
47	+	0		97	+	3.1
48	+	0		98	+	.4
49	+	0		99	+	.6
50	+	0		100	+	.2

b)

n		val		n		val
1	+	.1		51	+	.1
2	+	.1		52	-	3.2
3	+	.1		53	-	3.8
4	+	.1		54	+	.2
5	+	.1		55	+	.2
6	+	.1		56	-	1.7
7	+	0		57	-	1.3
8	+	0		58	+	.2
9	+	0		59	-	.7
10	+	0		60	-	.8
11	+	.8		61	-	.8
12	+	0		62	-	.8
13	+	0		63	-	.8
14	+	.8		64	-	1.8
15	+	.1		65	+	.2
16	+	.1		66	+	1.4
17	+	0		67	+	2.4
18	+	0		68	-	3.0
19	+	0		69	+	2.5
20	+	0		70	+	.1
21	+	0		71	-	1.2
22	+	0		72	-	.8
23	+	0		73	+	.2
24	+	0		74	-	2.1
25	+	0		75	-	2.5
26	+	0		76	-	1.9
27	+	0		77	+	.7
28	+	0		78	+	3.3
29	+	0		79	+	8.0
30	+	0		80	+	10.5
31	+	0		81	+	2.8
32	+	0		82	+	2.0
33	+	0		83	+	2.2
34	+	0		84	+	2.5
35	+	0		85	+	2.6
36	+	0		86	+	2.9
37	+	0		87	+	1.7
38	+	0		88	+	2.0
39	+	0		89	+	2.1
40	+	0		90	+	2.5
41	+	0		91	+	3.0
42	+	0		92	+	.5
43	+	0		93	+	1.8
44	+	0		94	-	2.3
45	+	0		95	+	2.7
46	+	0		96	+	3.0
47	+	0		97	+	3.1
48	+	0		98	+	3.1
49	+	0		99	+	3.5
50	+	0		100	+	.1

c)

n		val
1	+	.2
2	-	11.1
3	-	21.7
4	-	21.7
5	-	21.3
6	-	18.7
7	+	20.2
8	+	29.0
9	-	15.7
10	-	20.6
11	-	5.9
12	-	12.3
13	-	23.8
14	-	22.8
15	-	12.4
16	+	1.7
17	+	9.1
18	-	9.4
19	-	18.5
20	+	2
21	-	1.6
22	-	6.4
23	-	10.3
24	-	10.7
25	+	.2
26	+	.5
27	+	.9
28	-	2.3
29	-	2.9
30	+	.1

Seq. 5

2589   .10   0°   .10   0   10.0   +2.5°   1.049   2061.5   .002316

a)				b)				c)	
1 - .1	51 + .2			1 + .1	51 + .1			1 + .2	
2 + .1	52 - 3.2			2 + .1	52 - 3.3			2 - 7.3	
3 + .1	53 - 4.1			3 + .1	53 - 3.8			3 -16.0	
4 - 2.1	54 + 1.2			4 + .1	54 - 1.0			4 - 2.8	
5 + .1	55 + .9			5 + .1	55 + .2			5 -22.3	
6 + .1	56 + .2			6 + .1	56 - 1.1			6 -16.8	
7 + .1	57 + .3			7 + .1	57 + .2			7 +13.6	
8 + .1	58 + .5			8 + .1	58 + .5			8 +21.6	
9 + .1	59 + .1			9 + .1	59 + .5			9 - 9.1	
10 + .1	60 + .1			10 + .1	60 + .2			10 -19.8	
11 - .8	61 + .1			11 + 2.0	61 + .1			11 - 4.6	
12 + .1	62 + .2			12 + .1	62 + .2			12 -10.7	
13 + .1	63 + .1			13 + .1	63 + .3			13 -20.3	
14 + .1	64 + .2			14 + 1.1	64 - 1.2			14 -19.9	
15 + .1	65 + .4			15 + 0	65 + .3			15 -12.1	
16 + .1	66 + .2			16 + 0	66 + 1.4			16 + 5.4	
17 + .1	67 + .2			17 + 0	67 + 3.1			17 +14.1	
18 - 2.0	68 + .5			18 + 0	68 + 3.9			18 - 9.6	
19 + .1	69 + .7			19 + 0	69 + 2.5			19 -18.6	
20 + .1	70 + .2			20 + 0	70 + .4			20 + .2	
21 + 1	71 + .3			21 + 0	71 + .2			21 - 1.8	
22 + .1	72 + 1.0			22 + 0	72 + .2			22 - 7.9	
23 + .1	73 + 1 3			23 + 0	73 + .8			23 -13.3	
24 + .1	74 + .2			24 + .2	74 - 1.3			24 -16.1	
25 - .6	75 + .7			25 + 0	75 - 1.4			25 + .1	
26 + .1	76 + 1.8			26 + 0	76 + .6			26 + 2.1	
27 + .1	77 + 2.3			27 + 0	77 + 3.1			27 + 3.1	
28 + .1	78 + 1.1			28 + 0	78 + 5.4			28 + .2	
29 + .1	79 + 2.1			29 + 0	79 + 6.1			29 - 4.5	
30 + .1	80 + 2.9			30 + 0	80 + 4.5			30 + .1	
31 + .1	81 + 3.1			31 + 0	81 + 2.7				
32 - 1.3	82 + 3.2			32 + 0	82 + 2.7			Seq. 5	
33 + 0	83 + 7.0			33 + 0	83 + 2.6				
34 + 0	84 + 2.1			34 + 0	84 + 3.0				
35 + 0	85 + 2.6			35 + 0	85 + 3.2				
36 + 0	86 + 3.5			36 + 0	86 + 3.4				
37 + 0	87 + 3.6			37 + 0	87 + 3.7				
38 + 0	88 + .1			38 + 0	88 + 3.5				
39 - 2.5	89 + 6.1			39 + 0	89 + 3.5				
40 + .1	90 + 5.9			40 + 0	90 + 3.5				
41 + .1	91 + 2.4			41 + 0	91 + 3.6				
42 + .1	92 + .1			42 + 0	92 + 4.3				
43 + 0	93 + 4.1			43 + 0	93 + 3.0				
44 + 0	94 + 3.6			44 + 0	94 + 3.3				
45 + 0	95 + 3.8			45 + 0	95 + 3.6				
46 + 0	96 + 3.9			46 + 0	96 + 3.8				
47 + 0	97 + 2.7			47 + 0	97 + 3.9				
48 + 0	98 + .1			48 + 0	98 + 3.9				
49 + 0	99 + .1			49 + 0	99 + 3.9				
50 + 0	100 + .1			50 + 0	100 + .1				

```
2590   .10   0°   .10   0   10.0   0°   1.049   2061.5   .002316
```

a)				b)				c)	
1	+ 0	51	+ .2	1	. 0	51	+ .2	1	+ .1
2	+ 0	52	- 3.6	2	. 0	52	- 3.8	2	- 4.0
3	. 0	53	- 3.7	3	. 0	53	- 3.9	3	-10.7
4	- 2.6	54	+ 1.2	4	. 0	54	- 2.4	4	-19.3
5	. 0	55	+ 1.5	5	. 0	55	. .2	5	-19.8
6	- .1	56	+ 1.5	6	. 0	56	+ .2	6	-11.1
7	. .1	57	+ 1.5	7	. 0	57	+ .2	7	+ 6.7
8	- .1	58	+ 1.0	8	+ 0	58	+ 1.2	8	+12.0
9	- .1	59	+ .3	9	. 0	59	+ 1.2	9	- 2.4
10	- .1	60	+ .6	10	. 0	60	+ .9	10	-14.3
11	- .1	61	+ .7	11	. 1.6	61	+ .1	11	- 5.7
12	- .1	62	+ .4	12	. 0	62	+ .1	12	-12.8
13	- .1	63	+ .5	13	. 0	63	+ .2	13	-20.3
14	- .1	64	+ .9	14	. .8	64	- 1.9	14	-17.3
15	- .1	65	+ 1.2	15	. .1	65	+ .2	15	-14.7
16	- .1	66	+ .2	16	. .1	66	+ .9	16	+ 7.3
17	- .1	67	+ .5	17	+ .1	67	+ 2.3	17	+17.1
18	- 2.1	68	+ 1.2	18	. 0	68	+ 3.9	18	-11.4
19	- .1	69	+ 1.4	19	. 0	69	+ 2.1	19	-18.1
20	- .1	70	+ .6	20	. 0	70	. .3	20	+ .2
21	- .1	71	+ 1.6	21	. 0	71	+ .3	21	- 5.3
22	- .1	72	+ 1.3	22	. 0	72	+ .4	22	-10.4
23	- .1	73	+ 1.8	23	+ 0	73	+ .8	23	-19.0
24	- .1	74	+ 1.7	24	+ 1.1	74	- .9	24	-20.2
25	- 1.3	75	+ 1.9	25	. 0	75	. .2	25	- 8.8
26	- .1	76	+ 2.3	26	. 0	76	+ .8	26	+ 3.0
27	- .1	77	+ 3.1	27	+ 0	77	+ 2.1	27	+ 5.4
28	- .1	78	+ 2.8	28	. 0	78	. 2.8	28	- 1.6
29	- .1	79	+ 2.9	29	+ 0	79	+ 2.9	29	- 8.5
30	- .1	80	+ 3.4	30	. 0	80	. 2.9	30	. .1
31	- .1	81	+ 3.5	31	. 0	81	. 2.9		
32	- .1	82	+ 3.7	32	. 0	82	+ 2.9	Seq. 5	
33	- .1	83	+ 5.9	33	. 0	83	+ 3.2		
34	- .1	84	+ 2.0	34	+ 0	84	+ 3.4		
35	- .1	85	+ 3.6	35	. 0	85	. 3.5		
36	- .1	86	+ 3.7	36	. 0	86	. 3.6		
37	- .1	87	+ 3.9	37	. 0	87	. 6.2		
38	- .1	88	+ 1.4	38	. 0	88	. 3.1		
39	- .1	89	+ 6.3	39	+ 0	89	. 3.4		
40	- .1	90	+ 3.5	40	+ 0	90	. 3.6		
41	- .1	91	+ 3.7	41	. 0	91	. 3.8		
42	- .1	92	+ .1	42	. 0	92	+ 5.2		
43	- .1	93	+ 3.9	43	+ 0	93	. 3.1		
44	- .1	94	+ 4.0	44	+ 0	94	+ 3.4		
45	- .1	95	+ 4.0	45	+ 0	95	. 3.8		
46	- .1	96	+ 4.1	46	+ 0	96	. 3.9		
47	- .1	97	+ 3.8	47	+ 0	97	+ 4.1		
48	- .1	98	+ .1	48	+ 0	98	+ 4.1		
49	- .1	99	+ .1	49	+ 0	99	+ 4.1		
50	- .1	100	+ .1	50	+ 0	100	+ .1		

```
2591   .10   0°  .10   0   10.0  -2.5°  1.048  2061.5  .002316
```

a)				b)				c)	
1 + 0		51 + .2		1 - .1		51 .2		1 + .1	
2 + 0		52 - 4.4		2 - .1		52 - 4.3		2 - 2.4	
3 + 0		53 - 4.4		3 - .1		53 - 4.5		3 - 7.8	
4 - 2.8		54 .1		4 - .1		54 - 3.9		4 -15.4	
5 + U		55 .3		5 - .1		55 - 3.3		5 -16.8	
6 + 0		56 .2		6 - .1		56 - 3.3		6 - 3.6	
7 + 0		57 .2		7 - .1		57 - 1.6		7 3.7	
8 + 0		58 .1		8 - .1		58 1.9		8 5.6	
9 + 0		59 .1		9 - .1		59 2.1		9 + .1	
10 + 0		60 .1		10 - .1		60 1.9		10 - 9.6	
11 - .8		61 .1		11 .7		61 .1		11 - 9.1	
12 - .1		62 - .9		12 - .1		62 .1		12 -15.8	
13 - .1		63 .2		13 - .1		63 .1		13 -21.7	
14 - .1		64 .2		14 - .1		64 - 2.4		14 -20.2	
15 - .1		65 .2		15 0		65 .2		15 -18.5	
16 - .1		66 .2		16 + 0		66 .3		16 8.1	
17 - .1		67 .2		17 0		67 1.2		17 17.1	
18 - .9		68 .2		18 0		68 2.2		18 -15.2	
19 + 0		69 .2		19 0		69 1.6		19 -22.4	
20 0		70 .2		20 0		70 .2		20 .1	
21 0		71 .1		21 0		71 .2		21 - 7.2	
22 0		72 .2		22 - .1		72 .2		22 -16.2	
23 0		73 .3		23 - .1		73 .3		23 -25.9	
24 - .1		74 .5		24 2.1		74 .2		24 -25.8	
25 - 1.5		75 .7		25 - .1		75 .2		25 -19.6	
26 - .1		76 .8		26 - .1		76 .4		26 7.3	
27 - .1		77 1.3		27 - .1		77 .9		27 10.2	
28 - .1		78 1.6		28 - .1		78 1.3		28 - 7.2	
29 - .1		79 1.7		29 - .1		79 1.7		29 -17.4	
30 - .1		80 1.8		30 - .1		80 1.9		30 .1	
31 - .1		81 2.0		31 - .1		81 2.0			
32 - .1		82 2.1		32 - .1		82 2.2		Seq. 5	
33 - .1		83 3.4		33 - .1		83 2.4			
34 - .1		84 .5		34 - .1		84 2.5			
35 - .1		85 1.3		35 - .1		85 2.6			
36 - .1		86 1.8		36 - .1		86 2.8			
37 - .1		87 2.1		37 - .1		87 7.7			
38 - .1		88 .4		38 - .1		88 2.1			
39 - .1		89 2.0		39 - .1		89 4.6			
40 - .1		90 1.9		40 - .1		90 2.6			
41 - .1		91 2.1		41 - .1		91 3.0			
42 - .1		92 .1		42 - .1		92 5.5			
43 - .1		93 2.0		43 - .1		93 4.7			
44 - .1		94 2.7		44 - .1		94 2.9			
45 - .1		95 2.9		45 - .1		95 3.0			
46 - .1		96 3.0		46 - .1		96 3.1			
47 - .1		97 + 2.9		47 - .1		97 3.2			
48 - .1		98 .1		48 - .1		98 3.2			
49 - .1		99 .1		49 - .1		99 3.3			
50 - .1		100 + .1		50 - .1		100 + .1			

2592 .10 0° .10 0 10.0 -5.0° 1.048 2061.5 .002316

a)				b)				c)	
1 − .1	51 + .1	1 − .1	51 .1	1 + .1
2 − .1	52 − 4.3	2 − .1	52 − 4.3	2 + .1
3 − .1	53 − 4.3	3 − .1	53 − 4.3	3 − 5.9
4 − 4.0	54 − 4.1	4 − .1	54 − 3.8	4 −10.8
5 + 0	55 + .2	5 − .1	55 − 4.0	5 −12.3
6 + 0	56 + .2	6 − .1	56 − 4.5	6 + .1
7 + 0	57 + .2	7 − .1	57 − 4.3	7 + 2.0
8 + 0	58 − 3.1	8 − .1	58 − 1.1	8 + 3.0
9 + 0	59 − 2.5	9 − .1	59 + 3.5	9 + 1.0
10 + .5	60 + .2	10 − .1	60 + 5.3	10 − 2.7
11 − 3.2	61 .2	11 − .1	61 2.1	11 − 8.7
12 + 0	62 − 2.8	12 − .1	62 + .1	12 −17.0
13 + 0	63 − 2.2	13 − .1	63 − .8	13 −25.0
14 + 0	64 .1	14 − .1	64 − 3.3	14 −21.6
15 + 0	65 + .1	15 − .1	65 + .2	15 −19.2
16 + 0	66 − 2.0	16 − .1	66 .4	16 + 6.8
17 + 0	67 − 1.9	17 − .1	67 + 1.3	17 +15.0
18 − 1.9	68 .2	18 − .1	68 2.0	18 −17.1
19 − .1	69 .2	19 − .1	69 2.0	19 −24.1
20 − .1	70 − .2	20 − .1	70 .1	20 + .2
21 − .1	71 .1	21 − .1	71 − 1.4	21 −13.9
22 − .1	72 .1	22 − .1	72 − 1.4	22 −24.7
23 − .1	73 .1	23 − .1	73 + .2	23 −26.9
24 − .1	74 .2	24 + 2.1	74 − .9	24 −26.6
25 − 1.5	75 .3	25 − .1	75 .2	25 − 3.9
26 + 0	76 .3	26 − .1	76 .2	26 +16.4
27 + 0	77 + .7	27 − .1	77 + .3	27 19.6
28 + 0	78 1.7	28 − .1	78 .5	28 −17.6
29 − 0	79 1.8	29 − .1	79 .6	29 −22.7
30 + 0	80 1.8	30 − .1	80 .7	30 .1
31 + 0	81 1.8	31 − .1	81 .8	
32 + 0	82 1.9	32 − .1	82 − .9	
33 + 0	83 − 2.2	33 − .1	83 − 1.1	Seq. 5
34 + 0	84 1.2	34 − .1	84 1.4	
35 + 0	85 1.2	35 − .1	85 + 1.8	
36 − .1	86 1.2	36 − .1	86 + 2.0	
37 − .1	87 1.6	37 − .1	87 + 5.2	
38 − .1	88 1.0	38 − .1	88 1.8	
39 − .1	89 + 1.0	39 − .1	89 +11.1	
40 − .1	90 1.1	40 0	90 2.7	
41 − .1	91 1.3	41 + 0	91 2.8	
42 − .1	92 .2	42 + 0	92 4.0	
43 − .1	93 1.4	43 + 0	93 + 5.7	
44 − .1	94 1.9	44 + 0	94 1.0	
45 − .1	95 + 2.0	45 + 0	95 + 1.7	
46 − .1	96 2.3	46 + 0	96 2.5	
47 − .1	97 2.4	47 − .1	97 2.6	
48 − .1	98 .1	48 − .1	98 2.6	
49 − .1	99 + .1	49 − .1	99 2.7	
50 − .1	100 + .1	50 − .1	100 + .1	

2633 .10 0° .05 0 10.0 +2.5° 1.049 2061.5 .002317

a)

#	val	#	val
1	+ 0	51	.1
2	+ 0	52	- 6.6
3	+ 0	53	- 6.8
4	- 3.5	54	7.0
5	- 3.0	55	6.8
6	- .1	56	6.6
7	- .1	57	6.6
8	- .1	58	6.6
9	- .1	59	5.9
10	+ 7.5	60	5.9
11	- 2.1	61	5.9
12	+ 0	62	5.3
13	+ 0	63	5.4
14	+ 0	64	5.7
15	+ 0	65	6.0
16	+ 0	66	5.8
17	+ 0	67	5.9
18	- 4.9	68	6.1
19	+ 0	69	6.3
20	- .1	70	5.8
21	0	71	6.0
22	- .1	72	6.3
23	- .1	73	6.8
24	- .1	74	6.3
25	- 4.1	75	6.9
26	- 2.9	76	7.3
27	0	77	7.7
28	0	78	7.4
29	0	79	7.8
30	- .1	80	8.2
31	- .1	81	8.4
32	- 4.8	82	8.5
33	- .1	83	9.2
34	- .1	84	8.2
35	- .1	85	8.4
36	- .1	86	8.7
37	- .1	87	9.0
38	- .1	88	- 2.2
39	- 4.6	89	6.2
40	- 3.4	90	9.5
41	+ 0	91	9.5
42	+ 0	92	.2
43	- .1	93	7.5
44	- .1	94	8.5
45	- .1	95	8.9
46	- .1	96	9.3
47	- .1	97	7.7
48	- .1	98	.1
49	- .1	99	.1
50	- .1	100	.1

b)

#	val	#	val
1	0	51	.1
2	0	52	- 4.1
3	0	53	- 4.4
4	0	54	.2
5	0	55	.8
6	0	56	.9
7	0	57	3.7
8	0	58	6.0
9	0	59	6.8
10	0	60	7.1
11	3.1	61	7.2
12	.1	62	7.4
13	.1	63	7.8
14	.6	64	- 3.8
15	.1	65	- 3.8
16	.1	66	.2
17	.1	67	6.3
18	0	68	9.6
19	- 0	69	9.8
20	0	70	7.5
21	0	71	7.4
22	0	72	7.8
23	0	73	8.3
24	- 1.1	74	3.4
25	.4	75	5.1
26	.4	76	- 5.8
27	.4	77	- 3.9
28	.4	78	11.9
29	.4	79	13.1
30	.4	80	11.8
31	.4	81	9.8
32	.4	82	10.3
33	.4	83	10.6
34	.4	84	10.8
35	.4	85	10.9
36	.1	86	11.0
37	.1	87	10.6
38	.1	88	10.6
39	.1	89	10.4
40	.1	90	10.7
41	+ .1	91	11.0
42	+ .1	92	11.8
43	+ .1	93	10.1
44	+ .1	94	10.5
45	+ .1	95	11.0
46	+ .1	96	11.2
47	+ .1	97	11.4
48	+ .1	98	11.4
49	+ .1	99	11.5
50	+ .1	100	.1

c)

#	val
1	.1
2	4.4
3	- 3.2
4	-11.0
5	-12.7
6	.2
7	15.6
8	20.2
9	5.8
10	- 7.4
11	.7
12	- 3.7
13	-11.1
14	- 8.1
15	- 7.1
16	16.0
17	26.4
18	- 4.4
19	- 8.9
20	.2
21	2.2
22	- 1.8
23	- 8.8
24	-10.2
25	1.3
26	9.2
27	9.8
28	3.8
29	.1
30	.1

Seq. 5

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2634   .10   0°   .05   0   10.0   0°   1.048   2061.5   .002317
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a)				b)				c)	
1	+ 0	51	.2	1	+ .1	51	.2	1	.1
2	+ 0	52	- 3.8	2	+ .1	52	- 3.5	2	3.4
3	+ 0	53	- 4.5	3	+ .1	53	- 3.8	3	- 3.5
4	- 3.4	54	9.7	4	+ 0	54	- 3.2	4	-11.0
5	+ 0	55	9.9	5	+ 0	55	- 2.0	5	-11.8
6	+ 0	56	8.9	6	+ 0	56	- 1.6	6	- 3.4
7	+ 0	57	8.9	7	- 0	57	4.2	7	14.8
8	+ 0	58	8.9	8	+ 0	58	8.3	8	19.5
9	+ 0	59	8.9	9	+ 0	59	8.8	9	3.6
10	+ 1.3	60	8.9	10	+ 0	60	9.0	10	- 7.4
11	- 2.8	61	8.9	11	+ 0	61	9.0	11	2.9
12	+ 0	62	8.5	12	+ 0	62	9.3	12	- 2.1
13	- .1	63	8.5	13	+ 0	63	9.4	13	-12.4
14	- .1	64	8.8	14	+ 0	64	- 4.6	14	- 8.5
15	- .1	65	9.0	15	+ .5	65	- 2.0	15	- 5.7
16	- .1	66	7.7	16	+ 0	66	1.2	16	14.4
17	- .1	67	8.0	17	+ 0	67	8.3	17	-22.7
18	- 2.8	68	8.9	18	+ 0	68	11.7	18	- 2.8
19	- 2.4	69	9.3	19	+ 0	69	11.8	19	- 9.4
20	+ 0	70	8.7	20	- 0	70	9.2	20	+ .2
21	- .1	71	8.8	21	+ 0	71	9.1	21	- 3.6
22	- 0	72	9.1	22	- 0	72	9.4	22	- 2.2
23	+ 0	73	9.3	23	- 0	73	9.9	23	-10.2
24	- 0	74	9.4	24	- 0	74	- 2.1	24	-13.2
25	- 2.6	75	9.6	25	- 0	75	- 2.1	25	- .1
26	- 0	76	10.2	26	- 0	76	1.7	26	- 1.9
27	- 0	77	10.5	27	- 0	77	8.6	27	-13.1
28	- .1	78	10.5	28	- 0	78	11.0	28	4.7
29	- .1	79	10.6	29	+ 0	79	11.6	29	- 4.2
30	- .1	80	10.0	30	- 0	80	11.5	30	- .1
31	- .1	81	10.0	31	+ 0	81	11.7		
32	- 2.7	82	11.4	32	+ 0	82	11.8	Seq. 5	
33	- .1	83	11.6	33	+ 0	83	12.0		
34	- .1	84	7.4	34	- 0	84	12.1		
35	- .1	85	11.4	35	+ 0	85	12.2		
36	- .1	86	11.8	36	+ 0	86	12.3		
37	- .1	87	11.9	37	+ 0	87	13.8		
38	- .1	88	- .9	38	+ 0	88	12.1		
39	- 2.3	89	10.9	39	- 0	89	12.2		
40	- .1	90	11.2	40	+ 0	90	12.3		
41	- .1	91	11.5	41	+ 0	91	12.6		
42	- .1	92	.2	42	+ 0	92	11.9		
43	- .1	93	11.8	43	+ 0	93	12.0		
44	- .1	94	1.9	44	+ 0	94	12.2		
45	- .1	95	12.0	45	+ 0	95	12.5		
46	- .1	96	11.7	46	+ 0	96	12.6		
47	- .1	97	8.9	47	+ 0	97	12.7		
48	- .1	98	.1	48	+ 0	98	2.7		
49	- ..1	99	.1	49	0	99	12.8		
50	- .1	100	.1	50	+ 0	100	.1		

2635 .10 0° .05 0 10.0 ⌃ -2.5° 1.048 2061.5 .002317

a)					b)					c)	
1	+	.1	51	:	.1	1	-	.1	51	.1	c)1	:	.1
2	+	.1	52	- 4.0		2	-	.1	52	- 4.1	2	: 2.8
3	+	.1	53	- 4.1		3	-	.1	53	- 4.4	3	: .1
4	- 4.5		54	9.0		4	-	.1	54	- 4.3	4	- 8.8
5	+ 0		55	9.7		5	-	.1	55	- 6.1	5	-11.1
6	+ 0		56	9.4		6	-	.1	56	- 6.6	6	.3
7	+ 0		57	9.4		7	-	.1	57	- 4.4	7	11.1
8	+ 0		58	7.1		8	-	.1	58	- 8.9	8	14.5
9	+ 0		59	8.0		9	-	.1	59	10.3	9	3.8
10	+ 0		60	8.6		10	-	.1	60	10.5	10	- 4.0
11	- 4.8		61	8.7		11	- 40.5		61	7.7	11	.5
12	+ .1		62	7.1		12	-	.1	62	7.7	12	- 6.5
13	: 0		63	8.1		13	-	.1	63	7.9	13	-13.6
14	+ 0		64	8.6		14	- 3.1		64	4.0	14	-10.5
15	+ 0		65	8.8		15	-	.1	65	- 3.7	15	- 8.5
16	+ 0		66	7.4		16	-	.1	66	.5	16	-13.9
17	+ 0		67	7.6		17	-	.1	67	8.5	17	25.6
18	- 4.7		68	8.5		18	-	.1	68	13.1	18	- 4.9
19	+ 0		69	8.9		19	-	.1	69	13.3	19	- 9.9
20	- 0		70	7.7		20	-	.1	70	7.6	20	.1
21	0		71	7.9		21	-	.1	71	7.6	21	3.4
22	0		72	8.4		22	-	.1	72	7.9	22	- 3.5
23	0		73	9.0		23	-	.1	73	8.7	23	-10.5
24	0		74	9.3		24	-	.1	74	- .6	24	-14.7
25	- 3.5		75	9.6		25	-	.1	75	1.0	25	.2
26	0		76	9.7		26	-	.1	76	4.1	26	13.9
27	0		77	10.0		27	-	.1	77	7.5	27	14.3
28	0		78	10.3		28	-	.1	78	8.6	28	4.5
29	0		79	10.4		29	-	.1	79	9.4	29	- 3.9
30	0		80	10.5		30	-	.1	80	9.9	30	.1
31	0		81	10.6		31	-	.1	81	10.1		
32	- 2.5		82	10.9		32	-	.1	82	10.3	Seq. 5	
33	0		83	10.3		33	-	.1	83	10.5		
34	0		84	6.4		34	-	.1	84	10.8		
35	0		85	10.0		35	-	.1	85	11.0		
36	0		86	10.6		36	-	.1	86	11.1		
37	0		87	11.0		37	-	.1	87	14.7		
38	0		88	1.4		38	-	.1	88	11.0		
39	- 2.6		89	10.2		39	-	.1	89	12.3		
40	- .1		90	10.7		40	-	.1	90	11.6		
41	+ 0		91	10.9		41	-	.1	91	11.7		
42	+ 0		92	.1		42	-	.1	92	10.4		
43	+ 0		93	11.3		43	-	.1	93	11.6		
44	+ 0		94	10.5		44	-	.1	94	11.7		
45	+ 0		95	11.5		45	-	.1	95	1.7		
46	+ 0		96	11.6		46	-	.1	96	11.7		
47	+ 0		97	8.7		47	-	.1	97	11.8		
48	+ 0		98	.1		48	-	.1	98	11.8		
49	0		99	.1		49	-	.1	99	11.8		
50	+ 0		100	.1		50	-	.1	100	.1		

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2666   .10   0°   .03   0   10.0   +2.5°   1.048   2053.0   .002350
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a)				b)				c)	
1	- .1	51	.2	1	- 0	51	.1	1	.1
2	- .1	52	- 3.9	2	0	52	- 4.4	2	15.6
3	- .1	53	- 5.1	3	0	53	- 4.5	3	10.9
4	- 5.6	54	18.3	4	0	54	- 4.3	4	6.1
5	- 4.0	55	18.5	5	0	55	2.7	5	3.8
6	+ 0	56	16.4	6	0	56	4.8	6	16.9
7	- .1	57	16.8	7	0	57	13.9	7	24.3
8	- .1	58	17.1	8	0	58	17.6	8	29.2
9	- .1	59	17.3	9	0	59	21.0	9	25.3
10	- 6.9	60	17.5	10	0	60	21.8	10	10.9
11	- 5.1	61	17.6	11	- 2.3	61	22.6	11	17.6
12	- .9	62	17.0	12	- 0	62	21.8	12	- 8.4
13	+ 0	63	17.2	13	0	63	23.0	13	.6
14	+ 0	64	17.5	14	- 3.2	64	- 4.8	14	4.2
15	0	65	17.8	15	0	65	- 9.9	15	7.0
16	+ 0	66	17.7	16	- .1	66	.2	16	-24.3
17	+ 0	67	17.7	17	0	67	12.7	17	32.3
18	- 5.9	68	17.9	18	- 0	68	21.3	18	10.5
19	0	69	18.1	19	0	69	25.4	19	2.1
20	- .1	70	17.5	20	0	70	22.5	20	.1
21	- .1	71	17.8	21	0	71	19.2	21	11.1
22	- .1	72	18.1	22	0	72	9.2	22	5.0
23	- .1	73	18.3	23	0	73	19.6	23	.1
24	- .1	74	18.0	24	- 3.4	74	- 3.3	24	- .3
25	- 9.3	75	18.9	25	0	75	- 5.9	25	- 8.5
26	- .1	76	19.2	26	0	76	-10.4	26	19.9
27	- .1	77	19.3	27	0	77	- 1.6	27	26.8
28	- .1	78	18.2	28	0	78	22.8	28	-10.9
29	- .1	79	20.0	29	0	79	23.8	29	1.6
30	- .1	80	20.2	30	0	80	21.8	30	.1
31	- .1	81	20.3	31	0	81	19.1		
32	- 9.9	82	20.3	32	0	82	19.4		
33	0	83	21.1	33	0	83	19.0	Seq. 5	
34	- .1	84	17.5	34	0	84	19.9		
35	- .1	85	20.5	35	0	85	20.0		
36	- .1	86	20.7	36	0	86	20.1		
37	- .1	87	20.9	37	0	87	19.8		
38	- .1	88	- 3.4	38	0	88	20.3		
39	- 9.0	89	15.0	39	0	89	20.1		
40	- .1	90	23.9	40	0	90	20.1		
41	- .1	91	23.0	41	0	91	20.5		
42	- .1	92	2.2	42	0	92	20.0		
43	- .1	93	19.6	43	+ 0	93	20.4		
44	- .1	94	20.1	44	0	94	20.4		
45	- .1	95	20.5	45	0	95	21.2		
46	- .1	96	20.7	46	0	96	21.2		
47	- .1	97	17.1	47	+ 0	97	21.2		
48	- .1	98	.2	48	0	98	21.2		
49	- .1	99	.2	49	0	99	21.2		
50	- .1	100	.2	50	+ 0	100	.2		

```
        2667    .10    0°    .03    0    10.0    0°    1.048    2053.0    .002350
```

a)			b)		c)	
1 + .1	51 + .1		1 - .1	51 + .1	1 + .1	
2 + .1	52 - 2.6		2 - .1	52 - 2.9	2 +17.8	
3 + .1	53 - 3.9		3 - .1	53 - 5.3	3 +10.8	
4 - 7.4	54 +21.5		4 - .1	54 - 6.3	4 + 3.4	
5 - 4.1	55 +21.7		5 - .1	55 - 8.1	5 + 2.4	
6 + 0	56 +21.7		6 - .1	56 - 7.4	6 +11.6	
7 + 0	57 +21.7		7 - .1	57 + 6.1	7 +26.3	
8 + 0	58 +21.7		8 - .1	58 +17.5	8 +32.8	
9 + 0	59 +21.7		9 - .1	59 +21.1	9 +15.4	
10 + .7	60 +21.7		10 - .1	60 +21.1	10 + 7.1	
11 - 6.6	61 +21.7		11 - 3.6	61 +21.1	11 +17.4	
12 - 3.7	62 +21.4		12 - .1	62 +21.0	12 +11.6	
13 - 2.8	63 +21.4		13 + 0	63 +21.0	13 + 3.4	
14 + 0	64 +21.5		14 - 5.5	64 - 7.9	14 +10.0	
15 + 0	65 +21.6		15 - .1	65 - 8.8	15 +13.9	
16 + 0	66 +21.3		16 - .1	66 + .1	16 +27.3	
17 + 0	67 +21.3		17 - .1	67 +13.5	17 +35.0	
18 - 9.6	68 +21.5		18 - .1	68 +24.3	18 +18.4	
19 - 4.2	69 +21.6		19 - .1	69 +24.3	19 +12.2	
20 + 0	70 +21.6		20 - .1	70 +23.6	20 + .1	
21 + 0	71 +21.7		21 - .1	71 +23.1	21 +16.4	
22 + 0	72 +21.8		22 - .1	72 +23.1	22 +10.9	
23 + 0	73 +21.9		23 - .1	73 +23.1	23 + 3.1	
24 + 0	74 +21.7		24 - 2.9	74 - 4.4	24 + 2.0	
25 - 7.8	75 +21.9		25 - .1	75 + 6.3	25 +11.9	
26 + 0	76 +22.1		26 - .1	76 - .6	26 +26.5	
27 + 0	77 +22.3		27 - .1	77 +13.3	27 +27.7	
28 + 0	78 +22.5		28 - .1	78 +24.5	28 +16.2	
29 + 0	79 +22.6		29 - .1	79 +24.5	29 + 6.5	
30 + 0	80 +22.9		30 - .1	80 +24.5	30 + .1	
31 + 0	81 +23.1		31 - .1	81 +22.1		
32 - 7.2	82 +23.3		32 - .1	82 +22.3	Seq. 5	
33 - 4.0	83 +22.8		33 - .1	83 +22.4		
34 + .1	84 +20.3		34 - .1	84 +22.6		
35 + .1	85 +22.1		35 - .6	85 +22.7		
36 + .1	86 +22.6		36 - 1.1	86 +22.9		
37 + .1	87 +23.1		37 + 0	87 +23.0		
38 + .1	88 - 3.2		38 + 0	88 +23.0		
39 - 7.2	89 +19.3		39 + 0	89 +23.0		
40 + 0	90 +25.0		40 + 0	90 +23.1		
41 + 0	91 +24.9		41 + 0	91 +23.0		
42 + 0	92 + 4.5		42 + 0	92 +22.6		
43 + 0	93 +22.3		43 - .1	93 +25.2		
44 + 0	94 +22.9		44 - .1	94 +25.2		
45 + 0	95 +23.3		45 - .1	95 +25.2		
46 + 0	96 +23.6		46 - .1	96 +23.8		
47 + 0	97 +21.8		47 - .1	97 +23.8		
48 + 0	98 + .2		48 - .1	98 +23.8		
49 + 0	99 + .1		49 - .1	99 +23.8		
50 + 0	100 + .1		50 - .1	100 + .2		

2668   .10   0°   .03   0   10.0   -2.5°   1.048   2053.0   .002350

a)				b)				c)	
1 - .1	51 + .2			1 + 0	51 + .2			1 + .1	
2 - .1	52 - 5.6			2 + 0	52 - 2.9			2 +13.6	
3 - .1	53 - 5.9			3 + 0	53 - 4.1			3 + 5.3	
4 - 8.6	54 +15.4			4 + 0	54 - 4.1			4 + 1.3	
5 + 0	55 +24.0			5 + 0	55 - 7.5			5 + 1.5	
6 + 0	56 +20.5			6 + 0	56 -10.2			6 + 8.3	
7 + 0	57 +20.3			7 + 0	57 -19.4			7 +22.1	
8 + 0	58 +18.9			8 + 0	58 +17.1			8 +28.5	
9 - .1	59 +21.2			9 + 0	59 +26.4			9 +15.2	
10 + .8	60 +21.1			10 + 0	60 +24.8			10 + 6.6	
11 - 7.2	61 +20.8			11 - 2.9	61 +21.3			11 +15.3	
12 - .1	62 +20.1			12 + 0	62 +21.1			12 +12.3	
13 - .1	63 +22.2			13 + 0	63 +21.5			13 + 2.5	
14 - .1	64 +24.3			14 - 2.8	64 - 4.6			14 + 6.1	
15 - .1	65 +24.0			15 + 0	65 - 9.0			15 +11.4	
16 - .1	66 +21.3			16 + 0	66 + 2.5			16 +24.3	
17 - .1	67 +20.8			17 + 0	67 +22.8			17 +32.9	
18 - 6.7	68 +25.0			18 + 0	68 +26.5			18 +16.5	
19 - .1	69 +24.4			19 + 0	69 +26.0			19 + 2.4	
20 - .1	70 +26.4			20 + 0	70 +19.5			20 + .1	
21 - .1	71 +20.5			21 + 0	71 +18.8			21 +19.3	
22 - .1	72 +20.5			22 + 0	72 +18.8			22 +12.1	
23 - .1	73 +20.5			23 + 0	73 +18.8			23 + 5.2	
24 - .1	74 +20.5			24 - 1.1	74 - 1.5			24 + 3.1	
25 - 6.4	75 +19.8			25 + .1	75 + 3.0			25 +17.0	
26 + 0	76 +20.0			26 + .1	76 +12.9			26 +25.8	
27 + 0	77 +23.2			27 + .1	77 +19.1			27 +24.6	
28 + 0	78 +23.2			28 + .1	78 +23.1			28 +23.3	
29 - .1	79 +23.2			29 + .1	79 +24.6			29 +15.5	
30 - .1	80 +23.2			30 + 0	80 +25.8			30 + .1	
31 - .1	81 +25.0			31 + 0	81 +24.6				
32 - 5.1	82 +25.0			32 + 0	82 +24.4			Seq. 5	
33 - .8	83 +22.6			33 + 0	83 +24.3				
34 - .1	84 +18.3			34 + 0	84 +25.8				
35 - .1	85 +23.3			35 + 0	85 +25.5				
36 - .1	86 +23.2			36 - 2.4	86 +25.3				
37 - .1	87 +23.2			37 + .1	87 +29.8				
38 - .1	88 + 2.9			38 + 0	88 +20.2				
39 - 4.2	89 +16.2			39 + 0	89 +20.5				
40 + 0	90 +24.4			40 + 0	90 +20.9				
41 - .1	91 +24.5			41 + 0	91 +21.0				
42 - .1	92 + 4.4			42 + 0	92 +18.9				
43 - .1	93 +20.7			43 + 0	93 +24.6				
44 - .1	94 +21.0			44 + 0	94 +24.5				
45 - .1	95 +21.2			45 + 0	95 +24.5				
46 - .1	96 +21.3			46 + 0	96 +20.7				
47 - .1	97 +17.3			47 + 0	97 +20.9				
48 - .1	98 + .2			48 + 0	98 +20.9				
49 - .1	99 + .2			49 + 0	99 +21.1				
50 - .1	100 + .1			50 + 0	100 + .1				

FOR ERRATA

AD **41**4236

THE FOLLOWING PAGES ARE CHANGES

TO BASIC DOCUMENT

414 236

AD-414 236

Contract is corrected to read Nonr-20103

AD 414236

END CHANGE PAGES